



DHET New Universities Project Management Team

## **Occupational health and safety specification for construction works contracts**

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**DHET New Universities Project Management Team**



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# **Occupational health and safety specification for construction works contracts**

## **1 Scope**

This health and safety specification in respect of an engineering and construction works contract:

- a) provides the overarching framework within which the contractor is required to demonstrate compliance with certain requirements for occupation health and safety established by the Occupational Health and Safety Act of 1993 during construction;
- b) establishes the manner in which the contractor is to manage the risk of health and safety incidents in during the construction; and
- c) establishes the manner in which the employer's health and safety agent will interact with the contractor.

**Note 1** This specification establishes general requirements to enable the employer and the contractor to satisfy aspects of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Construction Regulations, 2014. The contractor is required to develop, implement and maintain package specific health and safety plans. The employer is required to provide certain package specific information to the contractor or a health and safety specification for the works to enable such plans to be formulated. Accordingly, this generic specification on its own cannot ensure compliance with the requirements of the aforementioned Act (See Annexure A).

**Note 2** The Construction Regulations, 2014, require an employer to stop any contractor from executing construction work which is not in accordance with the contractor's health and safety plan for the site or which poses to be a threat to the health and safety of persons.

**Note 3** This specification establishes generic health and safety requirements. Site specific requirements for health and safety are stated in the scope of work associated with a contract (see Annexure A).

**Note 4** The South African Council for the Project and Construction Management Professions has established the following specified categories of registration in terms of the Project and Construction Management Professions Act of 2000 (Act No. 48 of 2000):

- a) a Construction Health and Safety Agent who may be appointed by an employer to act as his agent in terms of the Occupational Health and Safety Act of 1993 and the Construction Regulations issued in terms of that Act;
- b) a Construction Health and Safety Manager who may be appointed by an employer to complement his professional team or by a contractor to manage company or project health and safety performance and compliance in accordance with the Occupational Health and Safety Act and Regulations; and
- c) a Construction Health and Safety Officers who may be appointed by an employer to mitigate the risk on a project or by a contractor to monitor and assist on-site health and safety performance and compliance in accordance with the Occupational Health and Safety Act and Regulations and services.

## **2 Definitions**

**Act:** the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)

**contractor:** person or organization that contracts to provide the works covered by the contract

**contract manager:** person appointed by the employer to administer the contract on his behalf

**competent person:** any person who:

- a) has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications specific to that work or task; and
- b) is familiar with the Act and applicable regulations made in terms of the Act

**danger:** anything which may cause injury or damage to persons or property

**employer:** person or organisation that enters into a contract with the contractor for the provision of the works covered by the contract

**employer's health and safety agent:** the person appointed as agent by the employer in terms of Regulation 4(5) of the Construction regulations and named in the contract data as the being the employer's agent responsible for health and safety matters

**ergonomics:** the application of scientific information concerning humans to the design of objects, systems and the environment for human use in order to optimise human well-being and overall system performance

**hazard:** a source of or exposure to danger

**hazard identification:** the identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed

**health and safety plan:** a documented plan which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified

**health and safety specification:** a site, activity or project specific document pertaining to all health and safety requirements related to construction works which is included in the contractor's contract with the employer or an order issued in terms of framework agreement

**healthy:** free from illness or injury attributable to occupational causes

**incident:** an event or occurrence occurring at work or arising out of or in connection with the activities of persons at work, or in connection with the use of plant or machinery, in which, or in consequence of which:

- a) any person dies, becomes unconscious, suffers the loss of a limb or part of a limb or is otherwise injured or becomes ill to such a degree that he is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or to continue with the activity for which he was employed or is usually employed;
- b) a major incident occurred; or
- c) the health or safety of any person was endangered and where:
  - i) a dangerous substance was spilled;

- ii) the uncontrolled release of any substance under pressure took place;
- iii) machinery or any part thereof fractured or failed resulting in flying, falling or uncontrolled moving objects; or machinery ran out of control

**inspector:** a person designated as such under section 28 the Act

**major incident:** an occurrence of catastrophic proportions, resulting from the use of plant or machinery, or from activities at a workplace

**reasonably practicable:** practicable having regard to:

- a) the severity and scope of the hazard or risk concerned;
- b) the state of knowledge reasonably available concerning that hazard or risk and of any means of removing or mitigating that hazard or risk;
- c) the availability and suitability of means to remove or mitigate that hazard or risk; and
- d) the cost of removing or mitigating that hazard or risk in relation to the benefits deriving therefrom;

**risk:** the probability that injury or damage will occur

**safe:** free from any hazard

**scaffold:** any temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both

**structure:**

- a) any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, bulk mixing plant, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure;
- b) any false work, scaffold or other structure designed or used to provide support or means of access during construction work; or
- c) any fixed plant in respect of construction work which includes installation, commissioning, decommissioning or dismantling and where any construction work involves a risk of a person falling

**substance:** any solid, liquid, vapour, gas or aerosol, or combination thereof

**suitable:** capable of fulfilling or having fulfilled the intended function or fit for its intended purpose

**temporary works:** any falsework, formwork, support work, scaffold, shoring or other temporary structure designed to provide support or means of access during construction

**workplace:** any premises or place where a person performs work in the course of his employment

### **3 Interpretation**

**3.1** The Act and its associated regulations shall have precedence in the interpretation of any ambiguity or inconsistency between it and this specification.

**3.2** Compliance with the requirements of this specification does not necessarily result in compliance with the provisions of the Act.

### **4 Requirements**

#### **4.1 General requirement**

The contractor shall:

- a) create and maintain as reasonably practicable a safe and healthy work environment;
- b) execute the works in a manner that complies with all the requirements of the Act and all its associated regulations, and in so doing, minimize the risk of incidents occurring;
- c) conspicuously display any site specific number assigned to the construction site in terms of the Construction Regulations 2014 at the main entrance to the site; and
- d) respond to the notices issued by the employer's health and safety agent as follows:
  - 1) Improvement Notice: improve health and safety performance over time so that repeat notices are not issued;
  - 2) Contravention Notice: rectify contravention as soon as possible;
  - 3) Prohibition Notice: terminate affected activities with immediate effect and only recommence activities when it is safe to do so.

Note: Financial penalties can be applied should Contravention Notices be issued. This should be dealt with in the Contract Data.

#### **4.2 Administration**

##### **4.2.1 Notification of intention to commence construction work**

**4.2.1.1** The contractor shall on sites where no construction work permit has been issued by the Provincial Director of the Department of Labour notify such director in writing using a form similar to that contained in Annexure 2 of the Construction Regulations issued in terms of the Act before construction work commences and retain proof of such notification in the health and safety file where the work includes:

- a) excavation work;

- b) working at height where there is a risk of falling;
- c) the demolition of a structure;
- d) the use of explosives; or
- e) a single storey dwelling for a client who is going to reside in such dwelling upon completion

**4.2.1.2** The contractor shall ensure that no work commences on an electrical installation which requires a new supply or an increase in electricity supply before the person who supplies or contracts or agrees to supply electricity to that electrical installation has been notified of such work.

**4.2.1.3** The contractor shall ensure that no asbestos work is carried out before the Provincial Director of the Department of Labour has been notified in writing.

#### **4.2.2 Copy of the Act**

The contractor shall ensure that a copy of the Act and relevant regulations is available on site for inspection by any person engaged in any activity on the site.

#### **4.2.3 Good standing with the compensation fund or a licensed compensation insurer**

The contractor shall before commencing with any works on the site provide the employer's health and safety representative with proof of good standing with the compensation fund or with a licensed compensation insurer.

#### **4.2.4 Emergency procedures**

**4.2.4.1** The contractor shall submit for acceptance to the employer's health and safety agent an emergency procedure which include but are not limited to fire, spills, accidents to employees, exposure to hazardous substances, which:

- a) identifies the key personnel who are to be notified of any emergency;
- b) sets out details including contact particulars of available emergency services; and
- c) the actions or steps which are to be taken during an emergency.

**4.2.4.2** The contractor shall within 24 hours of an emergency taking place notify the employer's health and safety agent in writing of the emergency and briefly outline what happened and how it was dealt with.

#### **4.2.5 Health and safety file**

**4.2.5.1** The contractor shall establish and maintain on site a health and safety file which contains copies, as relevant of:

a) the following documents which shall be placed in the file prior to commencing with physical construction activities

- 1) copy of the contraction work permit issued in terms of the Construction Regulations 2014;
- 2) the contractor's health and safety policy, signed by the chief executive officer, which outlines the contractor's objectives and how they will be achieved and implemented by the contractor;
- 3) copies of all risk assessments that were conducted
- 4) the notification made to the Provincial Director of Labour, and if relevant, the notification of the person who supplies or contracts or agrees to supply electricity to that electrical installation;
- 5) the letters of appointment, as relevant, together with a brief curricula vita (CV) of:
  - the construction manager and any assistant construction managers;
  - the construction health and safety manager
  - the construction health and safety officer
  - the risk assessor who is tasked to perform the risk assessments; and
  - the registered person responsible for the electrical installation covered by the Electrical Installations Regulations;
  - the authorised persons responsible for gas appliances, gas system gas reticulation system covered by the Pressure Equipment Regulations;
- 6) a copy of the certificate of registration of the registered person responsible for the electrical installation covered by the Electrical Installations Regulations;
- 7) the approval of the design of the part of an electrical installation which has a voltage in excess of 1 kV by a person deemed competent in terms of the Electrical Installations Regulations;
- 8) proof of registration of the electrical contractor who undertakes the electrical installation in terms of the Electrical Installations Regulations;
- 9) the preliminary hazard identification undertaken by a competent person;
- 9) the organogram which outlines the roles of the construction supervisor's assistants and safety officers; and
- 10) the contractor's health and safety plan;
- 11) the emergency procedures;
- 12) the procedure for the issuing and replacement of lost, stolen, worn or damaged personal protective clothing and equipment; and

- 13) proof that the contractor and all the subcontractors are registered and in good standing with the compensation fund or with a licensed compensation insurer relevant to the type of work performed;
- b) the following documents, as relevant, which shall be placed in the file after construction activities have commenced
  - 1) the letters of appointments, if relevant, together with a brief curricula vita (CV) of:
    - persons who are required to assist the construction supervisor;
    - construction supervisor for the site in respect of construction works covered by the Construction Regulations;
    - competent persons;
    - assistants of construction supervisor; and
    - designers of temporary works;.
  - 2) any revisions to the organogram which outlines the roles of the construction supervisor's assistants and safety officers;
  - 3) each and every subcontract agreement and each and every subcontractor's approved health and safety plan;;
  - 4) proof that the every subcontractor is registered and in good standing with the compensation fund or with a licensed compensation insurer relevant to the type of work performed;
  - 5) proof of all subcontractor's induction training whenever it is conducted;
  - 6) copies of the minutes of the contractor's subcontractors health and safety meetings;
  - 7) copies of each of the contractor's subcontractors' health and safety policy, signed by the chief executive officer, which outlines the contractor's objectives and how they will be achieved and implemented by the contractor;
  - 8) the health and safety plans of all the contractor's subcontractors who are required to provide such plans;
  - 9) copies of the fall protection plan and each revision thereof;
  - 10) a comprehensive and updated list of all the subcontractors employed on site by the contractor, indicating the type of work being performed by such sub-contractors;
  - 11) the outcomes of the monthly audits for compliance with the approved health and safety plan of each and every sub-contractor working on the site;
  - 12) any report made to an inspector by the health and safety committee;
  - 13) the minutes of all health and safety meetings and any recommendations made to the contractor by the health and safety committee;

- 14) the findings of all audit reports made regarding the implementation of the contractor's or a subcontractor's health and safety plan;
- 15) the inputs of the safety officer, if any, into the health and safety plan;
- 16) details of induction training conducted whenever it is conducted including the list of attendees;
- 17) proof of the following where suspended platforms are used:
  - a certificate of system design issued by a professional engineer, professional certificated engineer or a professional engineering technologist;
  - proof of competency of erectors, operators and inspectors;
  - proof of compliance of operational design calculations with requirements of the system design certificate;
  - proof of performance test results;
  - sketches indicating the completed system with the operational loading capacity of the platform;
  - procedures for and records of inspections having been carried out;
  - procedures for and records of maintenance work having been carried out;
  - proof that the prescribed documentation has been forwarded to the provincial director;
- 18) letters of appointments for competent persons to supervise the activities which law requires to be so supervised;
- 19) a copy of risk assessments made by competent persons;
- 20) records of the register of inspections made by a competent person immediately before and during the placement of concrete or any other load on formwork;
- 21) the names of the first aiders on site and copies of the first aid certificates of competency;
- 22) the names of the persons the persons who are in possession of valid certificate of competency in first aid and copies of such certificates;
- 23) medical certificates of fitness for the contractor's and subcontractors' employees specific to the construction work to be performed and issued by an occupational health and safety practitioner;
- 24) details of all incidents together with the Contractor's investigative report on such incident;
- 25) the record of inspections carried out by the designers of structures to ensure compliance with designs; and
- 26) any other documentation required in terms of regulations issued in terms of the Act including a record of all drawings, designs, materials used and other similar information concerning the completed structure;

**4.2.5.2** The health and safety file shall be made available for inspection by any inspector, subcontractor, the contract manager, the employer's health and safety agent or employee of the contractor upon the request of such persons.

**4.2.5.3** The health and safety file shall be updated to ensure that its contents always reflect the latest available information.

**4.2.5.4** The contractor shall hand over a copy of the health and safety file to the employer's health and safety agent upon completion of the contract and if relevant, a certificate of compliance accompanied by a test report for the electrical installation in accordance with the provisions of the Electrical Installation Regulations.

#### **4.2.6 Health and safety committee**

**4.2.6.1** The contractor shall convene health and safety meetings whenever more than two health and safety representatives have been appointed for the site. These meetings shall be attended by all health and safety representatives and persons nominated by the contractor. Such meetings shall be convened whenever necessary but at least once every month to:

- a) make recommendations to the contractor regarding any matter affecting the health or safety of persons on the site; and
- b) discuss any incident on the site in which or in consequence of which any person was injured, became ill or died.

**4.2.6.2** The contractor shall consult with the health and safety committee on the development, monitoring and review of the risk assessment.

**4.2.6.3** The contractor shall ensure that minutes of the health and safety committee meetings are kept. The employer's health and safety agent shall be invited to attend such meetings as an observer.

#### **4.2.7 Inspections, formal enquires and incidents**

**4.2.7.1** The contractor shall inform the relevant safety representative:

- a) beforehand of inspections, investigations or formal inquiries of which he has been notified by an inspector; and
- b) as soon as reasonably practicable of the occurrence of an incident on the site.

**4.2.7.2** The contractor shall record all incidents and notify the employer's health and safety agent of any incident, except in the case of a traffic accident on a public road, as soon as possible after it has occurred and report such incidence to an inspector of the department of labour and notify the Provincial Director of the Department of Labour of such incident within 7 days on the prescribed form.

**4.2.7.3** The contractor shall investigate all incidents and issue the employer's health and safety agent with copies of such investigations.

**4.2.7.4** The contractor shall in the event of an incident in which a person dies, or is injured to such an extent that he is likely to die, or suffered the loss of a limb or part of a limb:

- a) notify the Provincial Director of the Department of Labour of such incident by telephone, facsimile or similar means of communication;
- b) ensure that no person disturbs the site at which the incident occurred or remove any article or substance involved in the incident therefrom, without the consent of an inspector, unless an action is necessary to prevent a further incident, to remove the injured or dead, or to rescue persons from danger; and.
- c) provide the Provincial Director of the Department of Labour with a report which includes the measures that the contractor or his subcontractor intend to implement to ensure a safe site as reasonably practicable.

**4.2.7.5** The contractor shall notify the Provincial Director of the Department of Labour of the death of any person which results from injuries sustained in an incident.

## **4.2.8 Personal protective equipment and clothing**

The contractor shall ensure that:

- a) all workers are issued with the necessary personal protective clothing;
- b) all workers are identifiable at all times by having the company for which they work for printed on the back or front of their overalls; and
- c) clear procedures are in place for the replacement of lost, stolen, worn or damage personal protective clothing.

## **4.3 Appointments**

### **4.3.1 Construction manager**

The contractor shall appoint in writing one full time competent person as the construction manager with the duty of managing all the construction on a single site including that of ensuring occupational health and safety compliance. Where appropriate, the contractor shall appoint in writing one or more assistant construction managers.

### **4.3.2 Appointment of construction health and safety officers**

The contractor shall after consultation with the employer after considering the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the site, prior to commencing the work and if necessary, appoint a full-time or a part-time suitably qualified health and safety officer to assist in the control of all health and safety related aspects on the site.

### **4.3.3 Construction supervisors**

**4.3.3.1** The construction manager shall in writing appoint construction supervisors responsible for construction activities and ensuring occupational health and safety compliance on the construction site.

**4.3.3.2** A contractor shall after considering the size of the project and if considered necessary, appoint in writing one or more competent employees for different sections of the work to assist the construction supervisor.

#### **4.3.4 Competent persons**

**4.3.4.1** The contractor shall appoint in writing competent persons to supervise or inspect, as relevant, any of the following:

- a) formwork and support work operations;
- b) excavation work;
- c) demolition work;
- d) scaffolding work operations;
- e) suspended platform work operations;
- f) material hoists;
- f) bulk mixing plants;
- g) temporary electrical installations;
- h) the stacking and storage of articles on the site; and
- i) fire equipment.

**4.3.4.2** The contractor shall appoint in writing competent persons to:

- a) induct employees in health and safety; and
- b) prepare and update as necessary a fall protection plan and to provide the construction manager with a copy of the latest version of such plan.

#### **4.3.5 Health and safety representatives**

**4.3.5.1** The contractor shall appoint in writing one health and safety representative for every 50 employees working on the site, whenever there are more than 20 employees on the site, to:

- a) review the effectiveness of health and safety measures;
- b) identify potential hazards and potential major incidents;
- c) in collaboration with his employer, examine the causes of incidents;

- d) investigate complaints by any employee of the contractor relating to that employee's health or safety on the site;
- e) make representations to the contractor on matters arising from a), b), c) or d) or on general matters affecting the health or safety of the employees at the workplace;
- g) inspect the site with a view to, the health and safety of employees, at regular intervals;
- h) participate in consultations with inspectors at the workplace and accompany inspectors on inspections of the workplace; and
- i) participate in any internal health or safety audit.

**4.3.5.2** The contractor shall provide the health and safety representatives with the necessary assistance, facilities and training to carry out the functions established in 4.3.1

#### **4.4 Employer's health and safety agent**

**4.4.1** The employer's health and safety agent shall:

- a) audit the contractor's compliance with the requirements of this specification prior to the commencement of any physical construction activities on the site;
- b) accept or reject the contractor's health and safety plans, giving reasons for rejecting such plans;
- c) monitor the effective implementation of all safety plans;
- d) conduct periodic and random audits on the health and safety file to establish compliance with the requirements of this specification;
- e) visit the site at regular intervals to conduct site inspections, and based upon such visits issue, wherever necessary, Improvement Notices, Contravention Notices and Prohibition Notices, to the contractor or any of the contractor's subcontractors with a copy to the contract manager and, where relevant, to the contractor.

**4.4.2** The contractor shall invite the employer's health and safety agent to audit compliance with the requirements of this specification before commencing with any physical construction activity on the site.

#### **4.5 Creating and maintaining a safe and healthy work environment**

##### **4.5.1 General**

**4.5.1.1** The contractor shall with respect to the site and the construction works that are contemplated:

- a) cause a preliminary hazard identification to be performed by a competent person before commencing any physical construction activity;

- b) evaluate the risks associated with the identified hazard to the health and safety of such employees and the steps that need to be taken to comply with the Act; and
- c) as far as is reasonably practicable, prevent the exposure of such employees to the hazards concerned or, where prevention is not reasonably practicable, minimize such exposure.

**4.5.1.2** The contractor shall ensure that:

- a) all reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work;
- b) no structure or part of a structure is loaded in a manner which would render it unsafe; and
- c) account of information, if any, provided by the designer of the structure is taken into account in the risk assessment;

Note: The information provided by the designer should outline known or anticipated dangers or hazards relating to the works and make available all information required for the safe execution of the work. It should provide as relevant, geotechnical information (or make reference to reports provided in the site information), the loading the structure is designed to withstand, the methods and sequence of construction.

**4.5.1.3** The contractor shall carry out regular inspections and audits to ensure that the works are being performed in accordance with the requirements of this specification.

**4.5.2 Risk assessment**

**4.5.2.1** The contractor shall before the commencement of any work on site and during construction work, cause a risk assessment to be performed by a competent person appointed in writing. Such an assessment shall as a minimum:

- a) identify hazards to which persons may be exposed to;
- b) analyse and evaluate the identified risks associated with the identified hazards;
- c) document a plan of safe work procedures, including the use of any personal protective equipment or clothing and the undertaking of periodic “toolbox talks” or inductions before undertaking hazardous work, to mitigate, reduce or control the risks and hazards that have been identified;
- d) provide a monitoring plan; and
- e) provide a review plan.

Note: A risk assessment is an important step in protecting workers as well as complying with the law. It helps to focus on the risks that really matter in a particular workplace – the ones with the potential to cause real harm. Workers and others have a right to be protected from harm caused by a failure to take reasonable control measures. The following four steps are suggested:

- 1) Identify the hazards by looking at what could reasonably be expected to cause harm, ask employees or their representatives what they think, obtain advice from trade associations or publications on health and safety, check manufacturer's instructions or data sheets for chemicals and equipment as

they can be very helpful in spelling out the hazards and putting them in their true perspective, review accident and ill-health records, think about long-term hazards to health (eg high levels of noise or exposure to harmful substances) as well as safety hazards etc.

- 2) Identify who may be harmed and how by identifying how individuals and groups of people might be harmed i.e. what type of injury or ill health might occur.
- 3) Evaluate the risks and decide on precautions by doing everything 'reasonably practicable' to protect people from harm i.e. by looking at how things are done, what controls are in place and how the work is organised and comparing this against good practice to see if more can be done to bring practices up to standard. Consider if the hazard can be removed all together, and if not how can the risks be controlled so that harm is unlikely, e.g. try a less risky option (eg switch to using a less hazardous chemical); prevent access to the hazard (eg by guarding); organise work to reduce exposure to the hazard (eg put barriers between pedestrians and traffic); issue personal protective equipment (eg clothing, footwear, goggles etc); and provide welfare facilities (eg first aid and washing facilities for removal of contamination).
- 4) Record the findings by writing down the findings of the risk assessment.

**4.5.2.2** The contractor shall ensure that as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in the risk assessment.

**4.5.2.3** Notwithstanding the provisions of the fall protection plan, the contractor shall ensure that:

- a) all unprotected openings in floors, edges, slabs, hatchways and stairways are adequately guarded, fenced or barricaded or that similar means are used to safeguard any person from falling through such openings;
- b) no person works in an elevated position, unless such work is performed safely as if working from a scaffold or ladder;
- c) notices are conspicuously placed at all openings where the possibility exists that a person might fall through such openings;
- d) fall prevention and fall arrest equipment is:
  - suitable and of sufficient strength for the purpose or purposes for which it is being used having regard to the work being carried out and the load, including any person, it is intended to bear; and
  - securely attached to a structure or plant and the structure or plant and the means of attachment thereto is suitable and of sufficient strength and stability for the purpose of safely supporting the equipment and any person who is liable to fall;
- e) fall arrest equipment is only used where it is not reasonably practicable to use fall prevention equipment; and
- f) suitable and sufficient steps are taken to ensure, as far as is reasonably practicable, that in the event of a fall by any person, the fall arrest equipment or the surrounding environment does not cause injury to the person.

**4.5.2.4** Where roof work is being performed on a construction site, the contractor shall ensure that it is indicated in the fall protection plan that:

- a) the roof work has been properly planned;
- b) the roof erectors are competent to carry out the work;

- c) no employees are permitted to work on roofs during inclement weather conditions or if weather conditions are a hazard to the health and safety of the employees;
- d) prominent warning notices are to be placed where all covers to openings are not of sufficient strength to withstand any imposed loads and where fragile material exists;
- e) the areas mentioned in paragraph (d) are to be suitably barricaded off to prevent persons from entering;
- f) suitable and sufficient platforms, coverings or other similar means of support have been provided to be used in such a way that the weight of any person passing across or working on or from fragile material is supported; and
- g) there is suitable and sufficient guard-rails or barriers and toe-boards or other similar means of protection to prevent, so far as is reasonably practicable, the fall of any person, material or equipment.

#### **4.5.3 Health and safety plans**

**4.5.3.1** The contractor shall prior to commencing the works to which this specification applies, submit to the employer's health and safety agent for approval a suitable and sufficiently documented health and safety plan, based on this specification, the health and safety specification and the risk assessment that is conducted.

**4.5.3.2** The health and safety plan shall as a minimum provide:

- a) the information contained in Table 1 in respect of each of the hazards associated with work falling within the scope of the contract); and
- b) an outline of the manner in which the contractor intends complying with the requirements of this specification.

**Table 1: Example of the format of a health and safety plan**

| What are the hazards relating to work tasks? | Who might be harmed and how? | What are the safe work procedures for the site? | What further action is necessary (monitoring and review)? | Action by whom | Action by when |
|--|------------------------------|---|---|----------------|----------------|
|  |                              |   |   |                |                |
|  |                              |   |   |                |                |

**4.5.3.3** The contractor shall discuss the submitted health and safety plan with the employer's health and safety agent, modify such plan in the light of the discussions and resubmit the modified plan for approval.

**4.5.3.4** The contractor shall apply the approved health and safety plan from the date of its commencement and for the duration of the works to which this specification applies.

**4.5.3.5** The contractor shall conduct periodic audits for compliance with the approved health and safety plan at intervals agreed upon with the employer's health and safety agent, but at least once every month.

**4.5.3.6** The contractor shall review and update the health and safety plan whenever changes to the works are brought about or following the occurrence on an incident.

#### **4.5.4 Responsibilities towards employees and visitors**

**4.5.4.1** The contractor shall as far as is reasonably practicable, cause every employee to be made conversant with the hazards to his health and safety attached to any work which he has to perform, any article or substance which he has to produce, process, use, handle, store or transport and any plant or machinery which he is required or permitted to use, as well as with the precautionary measures which should be taken and observed with respect to those hazards or safe work procedures.

**4.5.4.2** The contractor shall ensure that all employees under his or her control and the employees of his subcontractors who are performing construction works are:

- a) informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment; and
- b) issued with proof of health and safety induction training issued by a competent person and carry proof of such induction when working on site.

**4.5.4.3** The contractor shall cause a record of training to be kept which indicates the training dates, the names, identity numbers and job description of all those who attended such training and the name, identity number and competence of the person who provided the training..

**4.5.4.4** The contractor shall not allow or permit any employee to enter the site, unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

**4.5.4.5** The contractor shall ensure that each visitor to a construction site, save where such visitor only visits the site office and is not in direct contact with the construction work activities:

- a) undergoes health and safety instruction pertaining to the hazards prevalent on the site; and
- b) is provided with the necessary personal protective equipment.

**4.5.4.6** The contractor shall provide suitable on-site signage to alert workers and visitors to health and safety requirements. Such signage shall include but not be limited to:

- a) unauthorized entrance prohibited;
- b) signage to indicate what personal protective equipment is to be worn; and

- c) activity related signs.

**4.5.4.7** The contractor shall not permit any person who is or who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a workplace.

#### **4.5.5 Subcontractors**

**4.5.5.1** The contractor may only subcontract work in terms of a written subcontract and shall only appoint a subcontractor should he be reasonably satisfied that such a subcontractor has the necessary competencies and resources to safely perform the work falling within the scope of the contract. Such a subcontract shall require that the subcontractor:

- a) co-operate with the contractor as far as is necessary to enable both the contractor and subcontractor to comply with the provisions of the Act; and
- b) as far as is reasonably practicable, promptly provide the contractor with any information which might affect the health and safety of any person at work carrying out work or any person who might be affected by the work of such a person at work or which might justify a review of the health and safety plan.

**4.5.5.2** The contractor shall provide any sub-contractor who is submitting a tender or appointed to perform a sub-contract falling within the scope of the contract, with the relevant sections of this specification and the health and safety specification.

**4.5.5.3** The contractor shall discuss and negotiate with each subcontractor performing construction works the subcontractor's health and safety plan and approve that plan for implementation.

**4.5.5.4** The contractor shall take reasonable steps as are necessary to ensure that:

- a) potential contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;
- b) each subcontractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to their performance of work on site;
- c) all the subcontractor's employees have a valid medical certificate of fitness specific to the construction works which are to be performed which is issued by an occupational health and safety practitioner;
- d) all sub-contractors co-operate with each other to enable each of those sub-contractors to comply with the requirements of the Act and associated regulations;
- e) each subcontractor performing construction works has and maintains a health and safety file containing the relevant information described in 4.2.5; and
- f) each sub-contractor's health and safety plan is implemented and maintained.

**4.5.5.5** The contractor shall conduct periodic document verifications and audits for compliance with the approved health and safety plan of each and every sub-contractor working on the site at intervals agreed upon with such subcontractors, but at least once per month.

**4.5.5.6** The contractor shall stop any subcontractor from executing construction work which is not in accordance with the contractor's or subcontractor's health and safety plan for the site or which poses a threat to the health and safety of persons.

**4.5.5.7** The contractor shall ensure that where changes to the works occur including design changes, sufficient health and safety information and appropriate resources are made available to subcontractor to execute the work safely.

**4.5.5.8** The contractor shall ensure that:

- a) every subcontractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site;
- b) potential subcontractors submitting tenders have made provision for the cost of health and safety measures during the construction process; and
- c) every subcontractor has in place a documented health and safety plan prior to commencing any work on site which falls within the scope of the contract.

**4.5.5.9** The contractor shall receive, discuss and approve health and safety plans submitted by subcontractors.

**4.5.5.10** The contractor shall ensure that all subcontractors are informed regarding any hazard as stipulated in the risk assessment before any work commences, and thereafter at such times as may be determined in the risk assessment.

**4.5.5.11** The contractor shall reasonably satisfy himself that all employees of subcontractors are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment.

**4.5.5.12** The contractor shall satisfy himself and ensure that all subcontractor employees deployed in the site are:

- a) informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment; and
- b) issued with proof of health and safety induction training issued by a competent person and carry proof such induction when working on site.

**4.5.5.13** The contractor shall undertake a risk assessment together with subcontractors whenever subcontractors are working in close proximity to other subcontractors particularly activities involve excavations, the moving of earth, the movement of heavy machinery and working at heights.

#### **4.5.6 First aid, emergency equipment and procedures**

**4.5.6.1** The contractor shall where more than five employees are employed at a workplace, provide a first aid box or boxes at or near the workplace which shall be available and accessible for the treatment of injured persons at that workplace. Such first aid boxes shall contain suitable first aid equipment which includes the items listed in the General Safety Regulations issued in terms of the Act.

**4.5.6.2** The contractor shall ensure that where there are more than 10 employees employed on the site that for every group of up to 50 employees at that workplace, at least one person is readily available during normal working hours, who is in possession of a valid certificate of competency in first aid.

#### **4.5.7 Facilities for workers**

**4.5.7.1** The contractor shall provide and keep clean and fit for use at or within reasonable access of the site:

- a) at least one shower facility for every 15 workers;
- b) at least one sanitary facility for every 30 workers;
- c) changing facilities for each gender; and
- d) sheltered eating areas.

**4.5.7.2** A contractor shall provide reasonable and suitable living accommodation for the workers at construction sites which are remote from their homes and where adequate transportation between the site and their homes, or other suitable living accommodation, is not available.

### **4.6 Design of temporary work**

The contractor shall:

- a) provide the health and safety agent with the names and contract particulars of the designers involved in the design of temporary works;
- b) issue the designers with a copy of the health and safety specification as well as any pertinent information contained in the contract; and ..
- c) provide the health and safety agent with certificates issued by the designer of the temporary works that such works are fit for purpose before such works are used in support construction activities.

## **Annexure A: Incorporating this specification in procurement documents**

**A1** The Occupational Health and Safety Act of 1993 (Act No. 181 of 1993) requires amongst other things that every employer provide and maintain, as far as is reasonably practicable, a working environment that is safe and without risk to the health of his employees (see section 8). The Act holds the employer liable for acts of omission of employees or mandataries (i.e. agents, contractors, or a subcontractor) unless it is proved that permission was not given to the employee or mandatory to act or fail to act in a manner which has obviously resulted in the flouting of the law, the employee or mandatory was acting outside the scope of his or her authority and that the questionable conduct of the employee or mandatory was not a condition laid down by the employer and the employer took reasonable steps to prevent the questionable / unlawful conduct of the employee or mandatory (see Section 37 of the Act). The employer can be relieved of this liability if the mandatory enters in writing into an agreement with the employer which sets out the arrangements and procedures to ensure compliance by the mandatory with the provisions of the Act.

**A2** The Construction Regulations 2014 require employers (clients) to enter into written agreements with contractors (principle contractors). These Regulations are specifically designed to force inter-action between the various role players in construction work. The employer is required to, amongst other things:

- a) provide the contractor with a documented health and safety specification for the construction work;
- b) provide the contractor with information which can affect the health and safety of anyone carrying out the construction works;
- c) take reasonable steps including periodic audits to ensure that the contractor implements and maintains his or her health and safety plan;
- d) stop where necessary any work which is not in accordance with the health and safety plan;
- e) ensure that tenderers have made provision for health and safety measures in the construction process; and
- f) discuss, negotiate and approve health and safety plans produced by the contractor.

The employer may, however, appoint an agent to act as his or her representative and where such an appointment is made, the responsibilities as are imposed by the regulations upon an employer, as far as reasonably practicable, are imposed upon the agent.

**A3** The designer of a structure is required to provide the employer with all relevant information about the structure which can affect the pricing of the structure, inform the contractor in writing of any known or anticipated dangers or hazards relating to the construction work and make available to the contractor all relevant information required for the safe execution of the work, geotechnical information, structural design loads and methods and sequence of construction.

**A4** The CIDB Standard for Uniformity in Construction Procurement requires that procurement documents comprise a number of component documents including the:

- a) scope of work i.e. the document that specifies and describes the goods, services, or engineering and construction works which are to be provided and any other requirements and constraints relating to the manner in which the contract work is to be performed
- b) site information i.e. the document that describes the site as at the time of tender, to enable the tenderer to price his tender and to decide upon his method of working and programming

**A5** Occupational health and safety is a constraint relating to the manner in which the contract work is to be performed. The scope of work needs to identify the high level package specific hazards identified by the employer and communicate to the contractor any information which can affect the health and safety of anyone carrying out the construction works and can influence the pricing of the contract. It should also contain information provided by the designer of structures relating to any known or anticipated dangers or hazards relating to the construction work and all relevant information required for the safe execution of the work, geotechnical information, structural design loads and methods and sequence of construction if not shown on the construction drawings. It also needs to incorporate by reference this specification.

**A6** Package specific information such as geotechnical information and existing buildings containing asbestos products should be included in the site information.