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AIDS HELPLINE: 0800-0123-22 Prevention is the cure

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GOVERNMENT NOTICES GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF LABOUR DEPARTEMENT VAN ARBEID

No. R. 1010

18 July 2003

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993

CONSTRUCTION REGULATIONS, 2003

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

SCHEDULE

Definitions

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

“agent” means any person who acts as a representative for a client;

“angle of repose” means the steepest angle of a surface at which a mass of loose or fragmented material will remain stationary in a pile on the surface, rather than sliding or crumbling away;

“batch plant” means machinery, appliances or other similar devices that are assembled in such a manner so as to be able to mix materials in bulk for the purposes of using the mixed product for construction work;

“client” means any person for whom construction work is performed;

“competent person” means any person having the knowledge, training, experience and qualifications specific to the work or task being performed: Provided that where appropriate qualifications and training are registered in terms of the provisions of the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995), these qualifications and training shall be deemed to be the required qualifications and training;

“construction work” means any work in connection with—

- (a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;
- (b) the installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
- (c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
- (d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;

“construction vehicle” means a vehicle used for means of conveyance for transporting persons or material or both such persons and material, as the case may be, both on and off the construction site for the purposes of performing construction work;

“contractor” means an employer, as defined in section 1 of the Act, who performs construction work and includes principal contractors;

“design” in relation to any structure includes drawings, calculations, design details and specifications;

“designer” means any of the following persons—

- (a) A person who prepares a design;
- (b) A person who checks and approves a design;
- (c) a person who arranges for any person at work under his control (including an employee of his, where he is the employer) to prepare a design, as well as;
- (d) an architect or engineer contributing to, or having overall responsibility for the design;
- (e) building services engineer designing details for fixed plant;
- (f) surveyor specifying articles or drawing up specifications;
- (g) contractor carrying out design work as part of a design and build project;
- (h) temporary works engineer designing formwork and false work; and
- (i) interior designer, shop-fitter and landscape architect.

“ergonomics” means the application of scientific information concerning humans to the design of objects, systems and the environment for human use in order to optimize human well-being and overall system performance;

“excavation work” means the making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping;

“explosive powered tool” means a tool that is activated by an explosive charge and that is used for driving bolts, nails and similar objects for the purpose of providing fixing;

“fall prevention equipment” means equipment used to prevent persons from falling from an elevated position, including personal equipment, body harness, body belts, lanyards, lifelines or physical equipment, guardrails, screens, barricades, anchorages or similar equipment;

“fall arrest equipment” means equipment used to arrest the person in a fall from an elevated position, including personal equipment, body harness, lanyards, deceleration devices, lifelines or similar equipment, but excludes body belts;

“fall protection plan” means a documented plan, of all risks relating to working from an elevated position, considering the nature of work undertaken, and setting out the procedures and methods to be applied in order to eliminate the risk;

“hazard identification” means 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 file” means a file, or other record in permanent form, containing the information required as contemplated in these regulations;

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

"health and safety specification" means a documented specification of all health and safety requirements pertaining to the associated works on a construction site, so as to ensure the health and safety of persons;

"material hoist" means a hoist used to lower or raise material and equipment, and includes cantilevered platform hoists, mobile hoists, friction drive hoists, scaffold hoists, rack and pinion hoists and combination hoists;

"medical certificate of fitness" means a certificate valid for one year issued by an occupational health practitioner, issued in terms of these regulations, whom shall be registered with the Health Professions Council of South Africa;

"method statement" means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment;

"mobile plant" means machinery, appliances or other similar devices that is able to move independently, for the purpose of performing construction work on the construction site;

"National Building Regulations" means the National Building Regulations made under section 17(1) of the National Building Regulations and Building Standards Act, 1977 (Act No.103 of 1977), and published under Government Notice No. R.1081 of 10 June 1988, as amended;

“person day” means one day for carrying out construction work by a person on a construction site for one normal working shift;

“principal contractor” means an employer, as defined in section 1 of the Act who performs construction work and is appointed by the client to be in overall control and management of a part of or the whole of a construction site;

“professional engineer or professional certificated engineer” means any person holding registration as either a Professional Engineer or Professional Certificated Engineer under the Engineering Profession Act, 2000 (Act No. 46 of 2000);

“professional technologist” means any person holding registration as a Professional Technologist under the Engineering Profession Act, 2000 ;

“provincial director” means the provincial director as defined in regulation 1 of the General Administrative Regulations under the Act;

“risk assessment” means a program to determine any risk associated with any hazard at a construction site , in order to identify the steps needed to be taken to remove, reduce or control such hazard;

“roof apex height” means the dimensional height in meters measured from the lowest ground level abutting any part of a building to the highest point of the roof;

“SABS 085” means the South African Bureau of Standards' Code of Practice entitled

“The Design, Erection, Use and Inspection of Access Scaffolding”;

"SABS 0400" means the South African Bureau of Standards, Code of Practice for the application of the National Building Regulations;

"SABS EN 1808" means the South African Bureau of Standards' Standard Specification entitled: "Safety requirements on suspended access equipment – Design calculations, stability criteria, construction-tests";

"SABS 1903" means the South African Bureau of Standards' Standard Front-end Specification entitled: "Safety requirements on suspended access equipment – Design calculations, stability criteria, construction-tests";

"scaffold" means any temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both;

"shoring" means a structure such as a hydraulic, mechanical or timber/steel shoring system that supports the sides of an excavation and which is intended to prevent the cave-in or the collapse of the sides of an excavation, and "shoring system" has a corresponding meaning;

"structure" means—

- (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, batching plants, 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 formwork, 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 work which includes the installation, commissioning, decommissioning or dismantling and where any such work involves a risk of a person falling two meters or more;

"suspended scaffold" means a working platform suspended from supports by means of one or more separate ropes from each support;

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

"tunneling" means the construction of any tunnel beneath the natural surface of the earth for a purpose other than the searching for or winning of a mineral;

Scope of application

2.(1) These Regulations, shall apply to any persons involved in construction work.

(2) The provisions of regulation 4.(1)(a) shall not be applicable where the construction work carried out is in relation to a single storey domestic building for a client who is going to reside in such building upon completion thereof.

(3) The provisions of regulations 4(1)(a) and 5(1), 5(3)(a) and 5(4) shall not be applicable where the construction work is in progress and more than fifty percent thereof has been completed at the date of promulgation of these regulations: Provided that an inspector may instruct accordingly that these Regulations shall be applicable.

Notification of construction work

3.(1) A principal contractor who intends to carry out any construction work shall—

(a) before carrying out that work, notify the provincial director in writing of the construction work if it includes—

(i) the demolition of a structure exceeding a height of 3 meters; or

(ii) the use of explosives to perform construction work; or

(iii) the dismantling of fixed plant at a height greater than 3 meters.

(b) before carrying out that work, notify the provincial director in writing when the construction work—

(i) exceeds 30 days or will involve more than 300 person days of construction work; and

(ii) includes excavation work deeper than 1 meter; or

- (iii) includes working at a height greater than 3 meters above ground or a landing.

(2) The notification to the provincial director contemplated in subregulation (1) must be done on the form similar to Annexure A to these Regulations.

(3) A principal contractor shall ensure that a copy of the completed form contemplated in subregulation (2) is kept on site for inspection by an inspector, client, client's agent or employee.

Client

4.(1) A client shall be responsible for the following in order to ensure compliance with the provisions of the Act:

- (a) to prepare a health and safety specifications for the construction work, and provide any principal contractor who is making a bid or appointed to perform construction work for the client with the same;
- (b) to promptly provide the principal contractor and his or her agent with any information which might affect the health and safety of any person at work carrying out construction work;
- (c) to appoint each principal contractor in writing for the project or part thereof on a construction site;

- (d) to take reasonable steps to ensure that each principal contractor's health and safety plan as determined in regulation 5(1) is implemented and maintained on the construction site: Provided that the steps taken, shall include periodic audits at intervals mutually agreed upon between the client and principal contractor, but at least once every month;
- (e) to stop any contractor from executing construction work, which is not in accordance with, the principal contractor's health and safety plan contemplated in regulation 5(1) for the site or which poses a threat to the health and safety of persons;
- (f) to ensure that where changes are brought about to the design or construction, sufficient health and safety information and appropriate resources are made available to the principal contractor to execute the work safely;
- (g) to ensure that every principal contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site; and
- (h) to ensure that potential principal contractors submitting tenders, have made provision for the cost of health and safety measures during the construction process.

(2) A client shall discuss and negotiate with the principal contractor the contents of the health and safety plan contemplated in regulation 5(1) and thereafter finally approve the health and safety plan for implementation.

(3) A client shall ensure that a copy of the principal contractor's health and safety plan is available on request to an employee, inspector or contractor.

(4) No client shall appoint a principal contractor to perform construction work, unless the client is reasonably satisfied that the principal contractor which he or she intends to appoint has the necessary competencies and resources to carry out the work safely.

(5) A client may appoint an agent in writing to act as his or her representative and where such an appointment is made, the responsibilities as are imposed by these regulations upon a client, shall as far as reasonably practicable apply to the agent so appointed.

(6) No client shall appoint any person as an agent, unless the client is reasonably satisfied that the person he or she intends to appoint has the necessary competencies and resources to perform the duties imposed on a client by these regulations.

Principal Contractor and Contractor

5. (1) A principal contractor shall provide and demonstrate to the client a suitable and sufficiently documented health and safety plan, based on the client's documented health and safety specifications contemplated in regulation 4(1)(a), which shall be applied from the date of commencement of and for the duration of the construction work.

(2) A principal contractor shall take reasonable steps as are necessary to ensure co-operation between all contractors to enable each of those contractors to comply with the provisions of these regulations.

(3) A principal contractor shall be responsible for the following in order to ensure compliance with the provisions of the Act—

- (a) to provide any contractor who is making a bid or appointed to perform construction work for the principal contractor, with the relevant sections of the health and safety specifications contemplated in regulation 4(1)(a) pertaining to the construction work which has to be performed;
- (b) to appoint each contractor contemplated in paragraph (a) in writing for the part of the project on a construction site;
- (c) to take reasonable steps to ensure that each contractor's health and safety plan contemplated in subregulation (4) is implemented and maintained on the construction site: Provided that the steps taken shall include periodic audits at intervals mutually agreed upon between the principal contractor and contractor(s), but at least once every month;
- (d) to stop any contractor from executing construction work, which is not in accordance with, the principal contractor's and/or contractor's health and safety plan for the site or which poses a threat to the health and safety of persons;
- (e) to ensure that where changes are brought about to the design and construction, sufficient health and safety information and appropriate resources are made available to the contractor to execute the work safely;

(f) to ensure that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site; and

(g) to ensure that potential contractors submitting tenders have made provision for the cost of health and safety measures during the construction process.

(4) A contractor shall provide and demonstrate to the principal contractor a suitable and sufficiently documented health and safety plan, based on the relevant sections of the principal contractor's health and safety specification contemplated in regulation 5(3)(a) provided by the principal contractor, which plan shall be applied from the date of commencement of and for the duration of the construction work.

(5) A principal contractor shall discuss and negotiate with the contractor the contents of the health and safety plan contemplated in subregulation (4), and shall finally approve that plan for implementation.

(6) A principal contractor shall ensure that a copy of his or her health and safety plan contemplated in subregulation (1), as well as the contractor's health and safety plan contemplated in subregulation (4), is available on request to an employee, inspector, contractor, client or client's agent.

(7) Every contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of the Act and these Regulations, is opened and kept on site and made available to an inspector, client, client's agent or principal contractor upon request.

(8) A principal contractor shall hand over a consolidated health and safety file to the client upon completion of the construction work and shall, in addition to the documentation referred to in subregulation (7), include a record of all drawings, designs, materials used and other similar information concerning the completed structure.

(9) A principal contractor shall ensure that in addition to the documentation required in the health and safety file as determined in subregulations (7) and (8), a comprehensive and updated list of all the contractors on site accountable to the principal contractor, the agreements between the parties and the type of work being done are included and available.

(10) No principal contractor shall appoint a contractor to perform construction work unless the principal contractor is reasonably satisfied that the contractor he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely.

(11) Where a contractor appoints another contractor to perform construction work, the responsibilities as determined in subregulations (2) to (6) that apply to the principal contractor shall apply to the contractor as if he or she were the principal contractor.

(12) No contractor shall appoint another contractor to perform construction work unless he or she is reasonably satisfied that the contractor he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely.

(13) Contractors shall co-operate with the principal contractor as far as is necessary to enable each of them to comply with the provisions of the Act.

(14) Every contractor shall as far as is reasonably practicable, promptly provide the principal contractor with any information which might affect the health and safety of any person at work carrying out construction 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.

Supervision of construction work

6.(1) The contractor shall appoint a full-time competent employee in writing as the construction supervisor, with the duty of supervising the construction work.

(2) The contractor may in writing appoint one or more competent employees to assist the appointed construction supervisor contemplated in subregulation (1), and every such employee shall, to the extent clearly defined by the contractor in the letter of appointment, have the same duties as the construction supervisor: Provided that the designation of any such employee shall not relieve the construction supervisor contemplated in subregulation (1) of any personal accountability for failing in his supervisory duties referred to in terms of this regulation.

(3) Where the contractor has not appointed an employee as referred to subregulation (2), or, in the opinion of an inspector, not a sufficient number of such employees, that inspector may require the employer to appoint the number of employees indicated by the inspector, and the provisions of subregulation (2) shall apply in respect of those employees as if they had in the first instance been appointed under subregulation (2).

(4) No construction supervisor appointed in terms of subregulation (1) shall supervise any construction work on or in any construction site other than the site in respect of which he or she has been appointed: Provided that a sufficient number of competent employees have been appropriately designated under subregulation (2) on all the construction sites, the appointed construction supervisor may supervise more than one site.

(5) If, however, the construction supervisor appointed in terms of subregulation (1) for more than one construction site will not, in the opinion of an inspector, be able to supervise the works favourably, an inspector may require the contractor to appoint the required number of employees as contemplated in subregulation (2) to assist the appointed construction supervisor or instruct the contractor to appoint the construction supervisor who had been appointed in terms of subregulation (1) more appropriately.

(6) A contractor shall upon having considered the size of the project, the degree of dangers likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time or part-time construction safety officer in writing to assist in the control of all safety related aspects on the site: Provided that, where the question arises as to whether a construction safety officer is necessary, the decision of an inspector shall be decisive.

(7) The appointed construction safety officer as contemplated in subregulation (6) shall as far as is reasonably practicable be utilised to give input at the early design stage and where not appointed at this stage, he or she shall be given the opportunity to input into the health and safety plan when wanting to do so, and a record of such shall be kept in the health and safety file contemplated in regulation 5(7).

(8) No contractor shall appoint a construction safety officer to assist in the control of safety related aspects on the site unless he or she is reasonably satisfied that the construction safety officer he or she intends to appoint, has the necessary competencies and resources to assist the contractor.

Risk assessment

7.(1) Every contractor performing construction work shall before the commencement of any construction work and during construction work, cause a risk assessment to be performed by a competent person appointed in writing and the risk assessment shall form part of the health and safety plan to be applied on the site and shall include at least—

- (a) the identification of the risks and hazards to which persons may be exposed to;
- (b) the analysis and evaluation of the risks and hazards identified;
- (c) a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- (d) a monitoring plan; and
- (e) a review plan.

(2) A contractor shall ensure that a copy of the risk assessment is available on site for inspection by an inspector, client, client's agent, contractor, employee, representative trade union, health and safety representative or any member of the health and safety committee.

(3) Every contractor shall consult with the health and safety committee or, if no health and safety committee exists, with a representative group of employees, on the development, monitoring and review of the risk assessment.

(4) A contractor shall ensure that all employees under the his or her control 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.

(5) A principal contractor shall ensure that all contractors 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.

(6) A contractor shall ensure that as far as is reasonably practicable, ergonomic related hazards are analyzed, evaluated and addressed in the risk assessment.

(7) Notwithstanding the requirements laid down in subregulation (4), no contractor shall allow or permit any employee or person to enter any site, unless such employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

(8) A contractor shall ensure that all visitors to a construction site undergoes health and safety induction pertaining to the hazards prevalent on the site and shall be provided with the necessary personal protective equipment.

(9) Every employee on site shall—

- (a) be in possession of proof of the health and safety induction training as determined in subregulation (7), issued by a competent person prior to the commencement of construction work; and
- (b) carry the proof contemplated in paragraph (a) for the duration of that project or for the period that the employee will be on the construction site.

Fall protection

8.(1) A contractor shall cause—

- (a) the designation of a competent person, responsible for the preparation of a fall protection plan;
- (b) the fall protection plan contemplated in (a) to be implemented, amended where and when necessary and maintained as required;
- (c) steps to be taken in order to ensure the continued adherence to the fall protection plan.

(2) The fall protection plan contemplated in subregulation (1), shall include—

- (a) a risk assessment of all work carried out from an elevated position which shall include the procedures and methods used to address all the risks identified per location;
- (b) the processes for evaluation of the employees' physical and psychological fitness necessary to work at elevated positions and the records thereof;
- (c) the programme for the training of employees working from elevated positions and records thereof; and
- (d) the procedure addressing the inspection, testing and maintenance of all fall protection equipment.

(3) A contractor shall ensure that the construction supervisor appointed in terms of regulation 6(1), is in possession of the most recently updated version of the fall protection plan.

(4) Notwithstanding the provisions of subregulations (1) and (2), 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—
 - (i) 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
 - (ii) 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 shall only be used where it is not reasonably practicable to use fall prevention equipment; and
- (f) suitable and sufficient steps shall be 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.

(5) Where roof work is being performed on a construction site, the contractor shall ensure that in addition to the requirements set out in subregulations (2) and (4), it is furthermore indicated in the fall protection plan—

- (a) that the roof work has been properly planned;
- (b) that the roof erectors are competent to carry out the work;
- (c) that 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) that 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) that the areas mentioned in paragraph (d) are to be barricaded off to prevent persons from entering;
- (f) that 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) that 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.

Structures

9.(1) A 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; and
- (b) no structure or part of a structure is loaded in a manner which would render it unsafe.

(2) The designer of a structure shall—

- (a) before the contract is put out to tender, make available to the client all relevant information about the design of the relevant structure that may affect the pricing of the construction work;
- (b) inform the contractor in writing of any known or anticipated dangers or hazards relating to the construction work, and make available all relevant information required for the safe execution of the work upon being designed or when the design is subsequently altered;
- (c) subject to the provisions of paragraph (a) and (b) ensure that the following information is included in a report and made available to the contractor—

- (i) a geo-science technical report where appropriate;
 - (ii) the loading the structure is designed to withstand; and
 - (iii) the methods and sequence of construction process.
- (d) not include anything in the design of the structure necessitating the use of dangerous procedures or materials hazardous to the health and safety of persons, which could be avoided by modifying the design or by substituting materials;
- (e) take into account the hazards relating to any subsequent maintenance of the relevant structure and should make provision in the design for that work to be performed to minimize the risk;
- (f) carry out sufficient inspections at appropriate times of the construction work involving the design of the relevant structure in order to ensure compliance with the design and a record of those inspections is to be kept on site;
- (g) stop any contractor from executing any construction work which is not in accordance with the relevant design;
- (h) conduct a final inspection of the completed structure prior to its commissioning to render it safe for commissioning and issue a completion certificate to the contractor; and

- (i) ensure that during commissioning, cognisance is taken of ergonomic design principles in order to minimize ergonomic related hazards in all phases of the life cycle of a structure.

(3) A contractor shall ensure that all drawings pertaining to the design of the relevant structure are kept on site and are available on request by an inspector, contractors, client, client's agent or employee.

(4) Any owner of a structure shall ensure that inspections of that structure upon completion are carried out periodically by competent persons in order to render the structure safe for continued use: Provided that the inspections are carried out at least once every six months for the first two years and thereafter yearly and records of such inspections are kept and made available to an inspector upon request.

(5) Any owner of a structure shall ensure that the structure upon completion is maintained in such a manner that the structure remains safe for continued use and such maintenance records shall be kept and made available to an inspector upon request.

Formwork and support work

10. A contractor shall ensure that—

- (a) all formwork and support work operations are carried out under the supervision of a competent person who has been appointed in writing for that purpose;

- (b) all formwork and support work structures are adequately designed, erected, supported, braced and maintained so that they will be capable of supporting all anticipated vertical and lateral loads that may be applied to them and also that no loads are imposed onto the structure that the structure is not designed to withstand;
- (c) the designs of formwork and support work structures are done with close reference to the structural design drawings and where any uncertainty exists, the structural designer should be consulted;
- (d) all drawings pertaining to the design of formwork or support work structures are kept on the site and are available on request by an inspector, contractor, client, client's agent or employee;
- (e) all equipment used in the formwork or support work structure are carefully examined and checked for suitability by a competent person, before being used;
- (f) all formwork and support work structures are inspected by a competent person immediately before, during and after the placement of concrete or any other imposed load and thereafter on a daily basis until the formwork and support work structure has been removed and the results have been recorded in a register and made available on site;
- (g) if, after erection, any formwork and support work structure is found to be damaged or weakened to such a degree that its integrity is affected, it shall be safely removed or reinforced immediately;

- (h) adequate precautionary measures are taken in order to—
 - (i) secure any deck panels against displacement; and
 - (ii) prevent any person from slipping on support work or formwork due to the application of formwork or support work release agents;
- (i) as far as is reasonably practicable, the health of any person is not affected through the use of solvents or oils or any other similar substances;
- (j) upon casting concrete, the support work or formwork structure should be left in place until the concrete has acquired sufficient strength to support safely, not only its own weight, but also any imposed loads and not removed until authorisation has been given by the competent person contemplated in paragraph (a);
- (k) provision is made for safe access by means of secured ladders or staircases for all work to be carried out above the foundation bearing level;
- (l) all employees required to erect, move or dismantle formwork and support work structures are provided with adequate training and instruction to perform these operations safely; and
- (m) the foundation conditions are suitable to withstand the weight caused by the formwork and support work structure and any imposed loads such that the formwork and support work structure is stable.

Excavation work

11.(1) A contractor shall ensure that all excavation work is carried out under the supervision of a competent person who has been appointed in writing.

(2) A contractor shall evaluate, as far as is reasonably practicable, the stability of the ground before excavation work begins.

(3) Every contractor who performs excavation work shall—

(a) take suitable and sufficient steps in order to prevent, as far as is reasonably practicable, any person from being buried or trapped by a fall or dislodgement of material in an excavation;

(b) not require or permit any person to work in an excavation which has not been adequately shored or braced: Provided that shoring and bracing may not be necessary where—

(i) the sides of the excavation are sloped to at least the maximum angle of repose measured relative to the horizontal plane; or

(ii) such an excavation is in stable material: Provided that—

(a) permission being given in writing by the appointed competent person contemplated in subregulation (1) upon evaluation by him or her of the site conditions; and

- (b) where any uncertainty pertaining to the stability of the soil still exists, the decision from a professional engineer or a professional technologist competent in excavations shall be decisive and such a decision shall be noted in writing and signed by both the competent person contemplated in subregulation (1) and the professional engineer or technologist, as the case may be;
- (c) take steps to ensure that the shoring or bracing contemplated in paragraph (b) is designed and constructed in such a manner rendering it strong enough to support the sides of the excavation in question;
- (d) ensure that no load, material, plant or equipment is placed or moved near the edge of any excavation where it is likely to cause its collapse and thereby endangering the safety of, any person, unless precautions such as the provision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;
- (e) ensure that where the stability of an adjoining building, structure or road is likely to be affected by the making of an excavation, the steps are taken that may be necessary to ensure the stability of such building, structure or road and the safety of persons;
- (f) cause convenient and safe means of access to be provided to every excavation in which persons are required to work and such access shall not be further than 6m from the point where any worker within the excavation is working;

(g) ascertain as far as is reasonably practicable the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed, and shall before the commencement of excavation work that may affect any such service, take the steps that may be necessary to render the circumstances safe for all persons involved;

(h) cause every excavation, including all bracing and shoring, to be inspected—

(i) daily, prior to each shift;

(ii) after every blasting operation;

(iii) after an unexpected fall of ground;

(iv) after substantial damage to supports; and

(v) after rain,

by the competent person contemplated in subregulation (1), in order to pronounce the safety of the excavation to ensure the safety of persons, and those results are to be recorded in a register kept on site and made available to an inspector, client, client's agent, contractor or employee upon request;

(i) cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be—

- (i) adequately protected by a barrier or fence of at least one metre in height and as close to the excavation as is practicable; and
 - (ii) provided with warning illuminants or any other clearly visible boundary indicators at night or when visibility is poor;
- (j) ensure that all precautionary measures as stipulated for confined spaces as determined in the General Safety Regulations promulgated by Government Notice No.R.1031 of 30 May 1986, as amended, are complied with when entering any excavation;
- (k) ensure that, where the excavation work involves the use of explosives, a method statement is developed in accordance with the applicable explosives legislation, by an appointed person who is competent in the use of explosives for excavation work and that the procedures therein are followed; and
- (l) cause warning signs to be positioned next to an excavation within which persons are working or carrying out inspections or tests.

Demolition work

12.(1) A contractor shall appoint a competent person in writing to supervise and control all demolition work on site.

(2) A contractor shall ensure that prior to any demolition work being carried out, and in order also to ascertain the method of demolition to be used, a detailed structural engineering survey of the structure to be demolished is carried out by a competent person and that a method statement on the procedure to be followed in demolishing the structure is developed.

(3) During the demolition, a competent person shall check the structural integrity of the structure at intervals determined in the method statement contemplated in subregulation (2), in order to avoid any premature collapses.

(4) Every contractor who performs demolition work shall—

(a) with regard to a structure being demolished, take steps to ensure that—

- (i) no floor, roof or other part of the structure is overloaded with debris or material in a manner which would render it unsafe;
- (ii) all reasonably practicable precautions are taken to avoid the danger of the structure collapsing when any part of the framing of a framed or partly framed building is removed, or when reinforced concrete is cut; and
- (iii) precautions are taken in the form of adequate shoring or such other means as may be necessary to prevent the accidental collapse of any part of the structure or adjoining structure;

- (b) not require or permit any person to work under overhanging material or structure, which has not been adequately supported, shored or braced;
- (c) take steps to ensure that any support, shoring or bracing contemplated in paragraph (b), is designed and constructed so that it is strong enough to support the overhanging material;
- (d) where the stability of an adjoining building, structure or road is likely to be affected by demolition work on a structure, take such steps as may be necessary to ensure the stability of such structure or road and the safety of persons;
- (e) ascertain as far as is reasonably practicable the location and nature of electricity, water, gas or other similar services which may in anyway, be affected by the work to be performed, and shall before the commencement of demolition work that may affect any such service, take the steps that may be necessary to render circumstances safe for all persons involved;
- (f) cause every stairwell used and every floor where work is being performed in a building being demolished, to be adequately illuminated by either natural or artificial means;
- (g) cause convenient and safe means of access to be provided to every part of the demolition site in which persons are required to work; and

(h) erect a catch platform or net above an entrance or passageway or above a place where persons work or pass under, or fence off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe where there is a danger or possibility of persons being struck by falling objects.

(5) A contractor shall ensure that no material is dropped to any point, which falls outside the exterior walls of the structure, unless the area is effectively protected.

(6) Waste and debris shall not be disposed from a high place by a chute unless the chute—

(a) is adequately constructed and rigidly fastened;

(b) if inclined at an angle of more than 45 degrees to the horizontal, is enclosed on its four sides;

(c) if of the open type, is inclined at an angle of less than 45 degrees to the horizontal;

(d) where necessary, is fitted with a gate at the bottom end to control the flow of material; and

(e) is discharged into a container or an enclosed area surrounded by barriers.

(7) A contractor shall ensure that every chute used to dispose of rubble is designed in such a manner that rubble does not free-fall and that the chute is strong enough to withstand the force of the debris traveling along the chute.

(8) A contractor shall ensure that equipment is not used on floors or working surfaces, unless such floors or surfaces are of sufficient strength to support the imposed loads.

(9) Where the risk assessment indicates the presence of asbestos, a contractor shall ensure that all asbestos related work is conducted in accordance with the provisions of the Asbestos Regulations promulgated by Government Notice No R,155 of 10 February 2002, as amended.

(10) Where the risk assessment indicates the presence of lead, a contractor shall ensure that all lead related work is conducted in accordance with the provisions of the, Lead Regulations promulgated by Government Notice No. R.236 of 28 February 2002, as amended.

(11) Where the demolition work involves the use of explosives, a method statement is to be developed in accordance with the applicable explosives legislation, by an appointed person who is competent in the use of explosives for demolition work and the procedures therein are adhered to.

(12) A contractor shall ensure that all waste and debris is as soon as reasonably practicable removed and disposed of from the site in accordance with the applicable legislation.

Tunnelling

13.(1) Any contractor performing tunneling activities shall comply with the Tunneling Regulations as published under the Mine Health and Safety Act, 1996 (Act No.29 of 1996), as amended.

(2) Notwithstanding the provisions of subregulation (1), no person shall enter a tunnel, which has a height dimension less than 800 mm.

Scaffolding

14.(1) Every contractor using access scaffolding, shall ensure that such scaffolding, when used, complies with the safety standards incorporated for this purpose into these Regulations under section 44 of the Act.

(2) A contractor shall ensure that all scaffolding work operations are carried out under the supervision of a competent person who has been appointed in writing and that all scaffold erectors, team leaders and inspectors are competent to carry out their work.

Suspended platforms

15.(1) A contractor shall ensure that all suspended platform work operations are carried out under the supervision of a competent person who has been appointed in writing, and that all suspended platform erectors, operators and inspectors are competent to carry out their work.

(2) No contractor shall use or permit the use of a suspended platform, unless—

- (a) the design, stability and construction thereof comply with the safety standards incorporated for this purpose into these Regulations under section 44 of the Act;
- (b) he or she is in possession of a certificate of system design issued by a professional engineer, certificated engineer or a professional technologist for the use of the suspended platform system; and
- (c) he or she is, prior to the commencement of the work, in possession of an operational compliance plan developed by a competent person based on the certificate of system design contemplated in paragraph (b) and applicable to the environment in which the system is being used, this must include proof of the—
 - (i) competent person who has been appointed for supervision;
 - (ii) competency of erectors, operators and inspectors;
 - (iii) operational design calculations which should comply with the requirements of the system design certificate;
 - (iv) performance test results;
 - (v) sketches indicating the completed system with the operational loading capacity of the platform;

(vi) procedures for and records of inspections having been carried out; and

(vii) procedures for and records of maintenance work having been carried out:

Provided that subregulation (2) shall only become applicable six months from the date of promulgation of these regulations.

(3) A contractor making use of a suspended platform system shall forward a copy of the certificate of system design issued by a professional engineer, certificated engineer or professional technologist including a copy of the design calculations, sketches and test results, to the provincial director before commencement of the use of the system and must further indicate the intended type of work the system would be used for.

(4) A contractor need not re-submit a copy of the certificate of system design contemplated in subregulation (3) for every new project: Provided that the environment in which the system is being used does not change to such an extent that the system design certificate is no longer applicable and, should uncertainty exist of the applicability of the system design certificate, the decision of a professional engineer, certificated engineer or professional technologist shall be decisive.

(5) A contractor shall ensure that the outriggers of each suspended platform—

(a) are constructed of steel or any other material of similar strength and have a safety factor of at least four in relation to the load it is to carry; and

- (b) have suspension points provided with stop devices or other effective devices at the outer ends to prevent the displacement of ropes.

(6) A contractor shall ensure that—

- (a) the parts of the building or structure on which the outriggers are supported, are checked by means of calculations to ensure that the required safety factor is adhered to without risk of damage to the building or structure;
- (b) the suspension wire rope and the safety wire rope are separately connected to the outrigger;
- (c) each person on a suspended platform is provided with and wears a safety harness as a fall prevention device which must at all times, be attached to the suspended platform or to the anchorage points on the structure whilst on the suspended platform;
- (d) the hand or power driven machinery to be used for the lifting or lowering of the working platform of a suspended platform is constructed and maintained in such a manner that an uncontrolled movement of the working platform cannot occur;
- (e) the machinery referred to in paragraph (d) is so situated that it is easily accessible for inspection;

- (f) the rope connections to the outriggers are vertically above the connections to the working platform; and
- (g) where the working platform is suspended by two ropes only, the connections of the ropes to the working platform are of such height above the level of the working platform as to ensure the stability of the working platform.

(7) A contractor shall ensure that the suspended platform—

- (a) is suspended as near as possible to the structure to which work is being done and, except when light work is being done, is secured at every working position to prevent horizontal movement between the suspended platform and the structure;
- (b) is fitted with anchorage points to which workers shall attach the lanyard of the safety harness worn and used by the worker and such anchorage connections shall have sufficient strength to withstand any potential load applied to it; and
- (c) is fitted with a conspicuous notice easily understandable by all workers working with the suspended platform, showing the maximum mass load which the suspended platform can carry.

(8) A contractor shall cause—

- (a) the whole installation and all working parts of the suspended platform to be thoroughly examined in accordance with the manufacturer's specification;

- (b) the whole installation to be subjected to a performance test as determined by the standard to which the suspended platform was manufactured;
- (c) the performance test contemplated in paragraph (b) to be done by a competent person appointed in writing with the knowledge and experience of erection and maintenance of suspended platforms or similar machinery and who shall determine the serviceability of the structures, ropes, machinery and safety devices before they are used, every time suspended platforms are erected;
- (d) the performance test contemplated in paragraph (b) of the whole installation of the suspended platform to be subjected to a load equal to that prescribed by the manufacturer or, in the absence of such load, to a load of 110 per cent of the rated mass load, at intervals not exceeding 12 months and in such a manner that every part of the installation is stressed accordingly.

(9) Notwithstanding the provisions of subregulation (8), the contractor shall cause every hoisting rope, hook or other load-attaching device which forms part of the suspended platform to be thoroughly examined in accordance with the manufacturer's specification by the competent person contemplated in subregulation (8) before they are used following every time they are assembled, and, in cases of continuous use, at intervals not exceeding three months.

(10) A contractor shall ensure that the suspended platform supervisor appointed in terms of the provisions of subregulation (1), or the suspended platform inspector mentioned in

subregulation (1), carries out a daily inspection of all the equipment prior to use, including establishing whether—

- (a) all connection bolts are secure;
- (b) all safety devices are functioning;
- (c) all safety devices are not tampered with or vandalized;
- (d) the maximum mass load of the platform is not exceeded;
- (e) the occupants in the suspended platform are using safety harnesses which have been properly attached;
- (f) there are no visible signs of damage to the equipment; and
- (g) all reported operating problems have been attended to.

(11) A contractor shall ensure that all inspection and performance test records are kept on the construction site at all times and made available to an inspector, client, client's agent or employee upon request.

(12) A contractor shall ensure that all employees required to work or to be supported on a suspended platform are—

- (a) physically and psychologically fit to work safely in such an environment by being in possession of a medical certificate of fitness;
- (b) competent in conducting work related to suspended platforms safely;
- (c) trained or had received training which include at least—
 - (i) how to access and egress the suspended platform safely;
 - (ii) how to correctly operate the controls and safety devices of the equipment;
 - (iii) information on the dangers related to the misuse of safety devices; and
 - (iv) information on the procedures to be followed in the case of—
 - (aa) an emergency;
 - (bb) the malfunctioning of equipment;
 - (cc) the discovery of a suspected defect in the equipment; and
 - (v) instructions on the proper use of safety harnesses.

(13) Where the outrigger is to be moved, the contractor shall ensure that only persons trained and competent to effect such move, perform this task and that an inspection be carried out and the results thereof be recorded by the competent person prior to re-use of the suspended platform.

(14) A contractor shall ensure that the suspended platform is properly isolated after use at the end of each working day such that no part of the suspended platform will present a danger to any person thereafter.

Boatswain's chairs

16.(1) A contractor shall ensure that every boatswain's chair or similar device is securely suspended and is constructed in such a manner so as to prevent any occupant from falling therefrom.

(2) The contractor shall ensure that an inspection is carried out prior and a performance test immediately after, the boatswain chair has been erected and thereafter a visual inspection should be carried out on a daily basis prior to use.

Material hoists

17.(1) A contractor shall ensure that every material hoist and its tower have been constructed of sound material in accordance with the generally accepted technical standards and are strong enough and free from defects.

(2) A contractor shall cause the tower of every material hoist to be—

- (a) erected on firm foundations and secured to the structure or braced by steel wire guy ropes and to extend to such a distance above the highest landing as to allow a clear and unobstructed space of at least 900 mm for overtravel;
 - (b) enclosed on all sides at the bottom, and at all floors where persons are at risk of being struck by moving parts of the hoist, except on the side or sides giving access to the material hoist, with walls or other effective means to a height of at least 2100 mm from the ground or floor level; and
 - (c) provided with a door or gate at least 2100 mm in height at each landing and such door or gate shall be kept closed, except when the platform is at rest at such a landing.
- (3) A contractor shall cause—
- (a) the platform of every material hoist to be designed in such a manner that it shall safely contain the loads being conveyed and that the combined weight of the platform and the load does not exceed the designed lifting capacity of the hoist;
 - (b) the hoisting rope of every material hoist which has a remote winch to be effectively protected from damage by any external cause to the portion of the hoisting rope between the winch and the tower of the hoist; and

- (c) every material hoist to be provided with an efficient brake capable of holding the platform with its maximum load in any position when the power is not being supplied to the hoisting machinery.
- (4) No contractor shall require or permit trucks, barrows or material to be conveyed on the platform of a material hoist and no person shall so convey trucks, barrows or material unless such articles are so secured or contained in such a manner that displacement thereof cannot take place during movement.
- (5) A contractor shall cause a notice, indicating the maximum mass load which may be carried at any one time and the prohibition of persons from riding on the platform of the material hoist, to be affixed around the base of the tower and at each landing.
- (6) A contractor of a material hoist shall not require or permit any person to operate such a hoist, unless the person is competent in the operation thereof.
- (7) No contractor shall require or permit any person to ride on a material hoist.
- (8) A contractor shall cause every material hoist—
- (a) to be inspected on a daily basis by a competent person who has been appointed in writing and has the experience pertaining to the erection and maintenance of material hoists or similar machinery;

- (b) inspection contemplated in paragraph (a), to include the determination of the serviceability of the entire material hoist including guides, ropes and their connections, drums, sheaves or pulleys and all safety devices;
- (c) inspection results to be entered and signed in a record book, which shall be kept on the premises for that purpose;
- (d) to be properly maintained and that the maintenance records in this regard are kept on site.

Batch plants

18.(1) A contractor shall ensure that all batch plants are operated and supervised by a competent person who has been appointed in writing.

(2) A contractor shall ensure that the placement and erection of a batch plant complies with the requirements set out by the manufacturer and that such plant is erected as designed.

(3) A contractor shall ensure that all devices to start and stop a batch plant are provided and that these devices are—

- (a) placed in an easily accessible position; and
- (b) constructed in such a manner as to prevent accidental starting.

(4) The contractor shall ensure that the machinery and plant selected is suitable for the task and that all dangerous moving parts of a mixer are placed beyond the reach of persons by means of doors, covers or other similar means.

(5) No person shall be permitted to remove or modify any guard or safety equipment relating to a batch plant, unless authorized to do so by the appointed person as contemplated in subregulation (1).

(6) A contractor shall ensure that all persons authorized to operate the batch plant are fully—

- (a) aware of all the dangers involved in the operation thereof; and
- (b) conversant with the precautionary measures to be taken in the interest of health and safety.

(7) No person supervising or operating a batch plant shall authorize any other person to operate the plant, unless such person is competent to operate such machinery.

(8) A contractor shall ensure that all precautionary measures as stipulated for confined spaces in the General Safety Regulations promulgated by Government Notice No.R.1031 dated 30 May 1986, as amended, are adhered to when entering any silo.

(9) A contractor shall ensure that a record is kept of any repairs or maintenance to a batch plant and that it is made available, on site, to an inspector, client, client's agent or employee upon request.

(10) A contractor shall ensure that all lifting machines and lifting tackle used in the operation of a batch plant complies with the requirements of the Driven Machinery Regulations promulgated by Government Notice No.R.295 dated 26 February 1988, as amended.

(11) A contractor shall ensure that all precautionary measures are adhered to regarding the usage of electrical equipment in explosive atmospheres, when entering a silo, as contemplated in the Electrical Installation Regulations promulgated by Government Notice No. R. 2271 dated 11 October 1995, as amended.

Explosive powered tools

19.(1) No contractor shall use or permit any person to use an explosive powered tool, unless—

(a) it is provided with a protective guard around the muzzle end, which effectively confines any flying fragments or particles; and

(b) the firing mechanism is so designed that the explosive powered tool will not function unless—

(i) it is held against the surface with a force of at least twice its weight; and

(ii) the angle of inclination of the barrel to the work surface is not more than 15 degrees from a right angle:

Provided that the provisions of this subregulation shall not apply to explosive powered tools in which the energy of the cartridge is transmitted to the bolts, nails or similar relevant objects by means of an intermediate piston which has a limited distance of travel.

(2) A contractor shall ensure that—

- (a) only cartridges suited for the explosive powered tool and the work to be performed are used;
- (b) the explosive powered tool is cleaned and examined daily before use and as often as may be necessary for its safe operation by a competent person who has been appointed;
- (c) that the safety devices are in proper working order prior to use;
- (d) when not in use, the explosive powered tool and the cartridges are locked up in a safe place, which is inaccessible to unauthorised persons;
- (e) the explosive powered tool is not stored in a loaded condition;
- (f) a warning notice is displayed in a conspicuous manner wherever the explosive powered tool is used;
- (g) the issuing and collection of cartridges and nails or studs is-
 - (i) controlled and done in writing by a person having been appointed in writing; and

(iii) recorded in a register and that the recipient has accordingly signed for the receipt thereof as well as the returning of any spent and unspent cartridges;

(3) No contractor shall permit or require any person to use an explosive powered tool unless such person has been—

(a) provided with and uses suitable protective equipment; and

(b) trained in the operation, maintenance and use of such a tool.

Cranes

20. Notwithstanding the provisions of the Driven Machinery Regulations promulgated by Government Notice No.R.533 of 16 March 1990, as amended, a contractor shall ensure that where tower cranes are used—

(a) account is taken of the effects of wind forces on the structure,

(b) account is taken of the bearing capacity of the ground on which the tower crane is to stand;

(c) the bases for the tower cranes and tracks for rail-mounted tower cranes are firm and level;

- (d) the tower cranes are erected at a safe distance from excavations;
- (e) there is sufficient clear space available for erection, operation and dismantling;
- (f) the tower crane operators are competent to carry out the work safely; and
- (g) the tower crane operators are physically and psychologically fit to work in such an environment by being in possession of a medical certificate of fitness.

Construction vehicles and mobile plant

21.(1) A contractor shall ensure that all construction vehicles and mobile plants—

- (a) are of an acceptable design and construction;
- (b) are maintained in a good working order;
- (c) are used in accordance with their design and the intention for which they were designed, having due regard to safety and health;
- (d) are operated by workers who-
 - (i) have received appropriate training and been certified competent and been authorised to operate such machinery; and

- (ii) are physically and psychologically fit to operate such construction vehicles and mobile plant by being in possession of a medical certificate of fitness;
- (e) have safe and suitable means of access;
- (f) are properly organised and controlled in any work situation by providing adequate signaling or other control arrangements to guard against the dangers relating to the movement of vehicles and plant, in order to ensure their continued safe operation;
- (g) are prevented from falling into excavations, water or any other area lower than the working surface by installing adequate edge protection, which may include guardrails and crash barriers;
- (h) where appropriate, are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn;
- (i) are equipped with an electrically operated acoustic signaling device and a reversing alarm; and
- (j) are on a daily basis inspected prior to use, by a competent person who has been appointed in writing and the findings of such inspection is recorded in a register.

(2) A contractor shall furthermore ensure that—

- (a) no person rides or be required or permitted to ride on any construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose;
- (b) every construction site is organised in such a way that, as far as is reasonably practicable, pedestrians and vehicles can move safely and without risks to health;
- (c) the traffic routes are suitable for the persons using them, sufficient in number, in suitable positions and of sufficient size;
- (d) every traffic route is, where necessary indicated by suitable signs for reasons of health or safety;
- (e) all construction vehicles and mobile plant left unattended at night, adjacent to a freeway in normal use or adjacent to construction areas where work is in progress, shall have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, in order to identify the location of the vehicles or plant;
- (f) bulldozers, scrapers, loaders, and other similar mobile plant are, when being repaired or when not in use, fully lowered or blocked with controls in a neutral position, motors stopped and brakes set;
- (g) whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation;
- (h) tools and material are secured in order to prevent movement when transported in the same compartment with employees;

- (i) vehicles used to transport employees have seats firmly secured and adequate for the number of employees to be carried; and
- (j) when workers are working on or adjacent to public roads, reflective indicators are provided and worn by the workers.

Electrical installations and machinery on construction sites

22.Notwithstanding the provisions contained in the Electrical Installation Regulations promulgated by Government Notice No.R.2920 of 23 October 1992 and the Electrical Machinery Regulations promulgated by Government Notice No. R.1953 of 12 August 1988, respectively, as amended, a contractor shall ensure that—

- (a) before construction commences and during the progress thereof, adequate steps are taken to ascertain the presence of and guard against danger to workers from any electrical cable or apparatus which is under, over or on the site;
- (b) all parts of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites;
- (c) in working areas where the exact location of underground electric power lines is unknown, employees using jackhammers, shovels or other hand tools which may make contact with a power line, are provided with insulated protective gloves or otherwise that the handle of the tool being used is insulated;
- (d) all temporary electrical installations are inspected at least once a week and electrical machinery on a daily basis before use on a construction site by

competent persons and the records of these inspections are recorded in a register to be kept on site; and

- (e) the control of all temporary electrical installations on the construction site is designated to a competent person who has been appointed in writing.

Use and temporary storage of flammable liquids on construction sites

23. Notwithstanding the provisions for the use and storage of flammable liquids as determined in the General Safety Regulations promulgated by Government Notice No.R1031 dated 30 May 1986, as amended, a contractor shall ensure that—

- (a) where flammable liquids are being used, applied or stored at the workplace concerned, this is done in such a manner which would cause no fire or explosion hazard, and that the workplace is effectively ventilated: Provided that where the workplace cannot effectively be ventilated—
 - (i) every employee involved is provided with a respirator, mask or breathing apparatus of a type approved by the chief inspector, and
 - (ii) steps are taken to ensure that every such employee, while using or applying flammable liquid, uses the apparatus supplied to him or her;
- (b) no person smokes in any place in which flammable liquid is used or stored, and such contractor shall affix a suitable and conspicuous notice at all entrances to any such areas prohibiting such smoking;

- (c) flammable liquids on a construction site is stored in a well-ventilated reasonably fire resistant container, cage or room and kept locked with proper access control measures in place;
- (d) an adequate amount of efficient fire-fighting equipment is installed in suitable locations around the flammable liquids store with the recognized symbolic signs;
- (e) only the quantity of flammable liquid needed for work on one day is to be taken out of the store for use;
- (f) all containers holding flammable liquids are kept tightly closed when not in actual use and, after their contents have been used up, to be removed from the construction site and safely disposed of;
- (g) where flammable liquids are decanted, the metal containers are bonded or earthed; and
- (h) no flammable material such as cotton waste, paper, cleaning rags or similar material is stored together with flammable liquids.

Water environments

24.(1) A contractor shall ensure that where construction work is done over or in close proximity to water, provision is made for—

(a) preventing workers from falling into water; and

(b) the rescuing of workers in danger of drowning.

(2) A contractor shall ensure that where a worker is exposed to the risk of drowning by falling into the water, a lifejacket is provided to and worn by the worker.

Housekeeping on construction sites

25. Notwithstanding the provisions of the Environmental Regulations for Workplaces promulgated by Government Notice No. R2281 dated 16 October 1987, as amended, a contractor shall ensure that—

(a) suitable housekeeping is continuously implemented on each construction site, including provisions for the—

(i) proper storage of materials and equipment; and

(ii) removal of scrap, waste and debris at appropriate intervals;

(b) loose materials required for use, are not placed or allowed to accumulate on the site so as to obstruct means of access to and egress from workplaces and passageways;

(c) waste and debris are not disposed of from a high place with a chute, unless the chute complies with the requirements set out regulation 12(6);

- (d) construction sites in built-up areas, adjacent to a public way, are suitably and sufficiently fenced off and provided with controlled access points to prevent the entry of unauthorized persons.
- (e) a catch platform or net is erected above an entrance or passageway or above a place where persons work or pass under, or fence off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe in the case of danger or possibility of persons being struck by falling objects.

Stacking and storage on construction sites

26. Notwithstanding the provisions for the stacking of articles contained in the General Safety Regulations promulgated by Government Notice No.R1031 dated 30 May 1986, as amended, a contractor shall ensure that—

- (a) a competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
- (b) adequate storage areas are provided;
- (c) there are demarcated storage areas; and
- (d) storage areas are kept neat and under control.

Fire precautions on construction sites

27. Subject to the provisions of the Environmental Regulations for Workplaces promulgated by Government Notice No.R.2281 of 16 October 1987, as amended, every contractor shall ensure that—

- (a) all appropriate measures are taken to avoid the risk of fire;
- (b) sufficient and suitable storage is provided for flammable liquids, solids and gases;
- (c) smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- (d) in confined spaces and other places in which flammable gases, vapours or dust can cause danger—
 - (i) only suitably protected electrical installations and equipment, including portable lights, are used;
 - (ii) there are no flames or similar means of ignition;
 - (iii) there are conspicuous notices prohibiting smoking;
 - (iv) oily rags, waste and other substances liable to ignite are without delay removed to a safe place; and

- (v) adequate ventilation is provided;
- (e) combustible materials do not accumulate on the construction site;
- (f) welding, flame cutting and other hot work are done only after the appropriate precautions as required have been taken to reduce the risk of fire;
- (g) suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned, and that such equipment is maintained in a good working order;
- (h) the fire equipment contemplated in paragraph (g) is inspected by a competent person, who has been appointed in writing, in the manner indicated by the manufacturer thereof;
- (i) a sufficient number of workers are trained in the use of fire-extinguishing equipment;
- (j) where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
- (k) the means of escape is kept clear at all times;
- (l) there is an effective evacuation plan providing for all—
 - (i) persons to be evacuated speedily without panic;

- (ii) persons to be accounted for, and
- (iii) plant and processes to be shut down; and
- (m) a siren is installed and sounded in the event of a fire.

Construction welfare facilities

28.(1) Notwithstanding the construction site provisions contained in the Facilities Regulations promulgated by Government Notice No.R. 1593 of 12 August 1988, as amended, a contractor shall, depending on the number of workers and the duration of the work, provide at or within reasonable access of every construction site, the following clean and maintained facilities:—

- (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 sex; and
- (d) sheltered eating areas.

(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.

Approved Inspection Authorities

29. (1) The Chief Inspector may approve as an Inspection Authority any organization that has been accredited in terms of the provision of the Act and these regulations.

(2) The Chief Inspector may at any time withdraw any approval of an approved inspection authority, subject to section 35 of the Act.

Offences and penalties

30. Any person who contravenes or fails to comply with any of the provisions of regulations 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27 and 28, shall be guilty of an offence and liable upon conviction to a fine or to imprisonment for a maximum of 12 months and, in the case of a continuous offence, to an additional fine of R200 for each day on which the offence continues or additional imprisonment of one day for each day on which the offence continues: Provided that the period of such additional imprisonment shall not exceed 90 days.

Repeal of regulations

31. The following regulations are herewith repealed:

- (a) Regulations 11, 12, 13, 13C, 13D, 13E, 13F and 13G of the, General Safety Regulations promulgated by Government Notice No.R.1031 of 30 May 1986;

- (b) regulations 19 and 20 of the, Driven Machinery Regulations promulgated by Government Notice No.R.295 of 26 February 1988; and
- (c) regulations 14 of the, General Administrative Regulations promulgated by Government Notice No.R.1449 of 6 September 1996.

Short title

32. These regulations shall be known as the Construction Regulations, 2003.

ANNEXURE A

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993

Regulation 3 of the Construction Regulations, 2003

NOTIFICATION OF CONSTRUCTION WORK

1.(a) Name and postal address of principal contractor:

(b) Name and tel. no of principal contractor's contact person:

2. Principal contractor's compensation registration number:

3.(a) Name and postal address of client:

(b) Name and tel no of client's contact person or agent:

4.(a) Name and postal address of designer(s) for the project:

(b) Name and tel. no of designer(s) contact person:

5. Name and telephone number of principal contractor's construction supervisor on site appointed in terms of regulation 6(1).

6. Name/s of principal contractor's sub-ordinate supervisors on site appointed in terms of regulation 6(2).

7. Exact physical address of the construction site or site office:

8. Nature of the construction work:

9. Expected commencement date: _____

10. Expected completion date: _____

11. Estimated maximum number of persons on the construction site.

12. Planned number of contractors on the construction site accountable to principal contractor: _____

13. Name(s) of contractors already chosen.

Principal Contractor

Date

Client

Date

- THIS DOCUMENT IS TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR **PRIOR TO COMMENCEMENT** OF WORK ON SITE.
- **ALL PRINCIPAL CONTRACTORS** THAT QUALIFY TO NOTIFY MUST DO SO EVEN IF ANOTHER PRINCIPAL CONTRACTOR ON THE SAME SITE HAD DONE SO PRIOR TO THE COMMENCEMENT OF WORK.

DEPARTMENT OF LABOUR

No. R. 1020

18 July 2003

Occupational Health and Safety Act, 1993**Incorporation of Safety Standards in the Construction Regulations, 2003**

Under section 44 of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), I, Membathisi Mphumzi Sherpard Mdladlana, Minister of Labour, after consultation with the Advisory Council for Occupational Health and Safety, hereby incorporate in the Construction Regulations, 2003 the health and safety standards specified in the Schedule.

M M S Mdladlana Minister of Labour.

SCHEDULE**1. Regulation 14(1)**

The South African Bureau of Standards' Code of Practice SABS 085, as amended, entitled "The Design, Erection, Use and Inspection of Access Scaffolding".

2. Regulation 15(2)(a)

The South African Bureau of Standards' Standard Specification SABS EN 1808, as amended, entitled "Safety Requirements on Suspended Access Equipment – Design calculations, stability criteria, construction-tests".

The South African Bureau of Standards' Standard Front-end Specification SABS 1903, as amended, entitled "Safety Requirements on Suspended Access Equipment – Design calculations, stability criteria, construction-tests".

DEPARTEMENT VAN ARBEID

No. R. 1010

18 Julie 2003

**WET OP BEROEPSGESONDHEID EN VEILIGHEID, 1993:
KONSTRUKSIEREGULASIES**

Die Minister van Arbeid het kragtens artikel 43 van die Wet op Beroepsgesondheid en Veiligheid, 1993 (Wet 85 van 1993), na oorlegpleging met die Adviesraad vir Beroepsgesondheid en Veiligheid, die regulasies in die Bylae uitgevaardig.

BYLAE**Woordomskrywings**

1. In hierdie regulasies het 'n woord of uitdrukking waaraan 'n betekenis in die Wet geheg word, die betekenis aldus daaraan geheg en, tensy uit die samehang anders blyk, beteken-

"bevoegde persoon" met betrekking tot konstruksiewerk, 'n persoon met die kennis, opleiding en ervaring wat spesifiek betrekking het op die werk of taak wat uitgevoer word, en moet die bevoegde persoon in besit wees van 'n opleidingsertifikaat wat binne een jaar vanaf die datum van die uitvaardiging van hierdie regulasies uitgereik is deur 'n persoon of organisasie wat vir daardie doel deur die hoofinspekteur goedgekeur is;

"die Wet" die Wet op Beroepsgesondheid en Veiligheid, 1993 (Wet 85 van 1993),

"geregisteerde professionele ingenieur of geregisteerde gediplomeerde ingenieur" 'n persoon wat as 'n professionele of 'n gediplomeerde ingenieur geregistreer is ingevolge die Wet op die Ingenieursberoep van Suid-Afrika, 1990 (Wet No. 114 van 1990);

"gesondheid-en-veiligheid-program" 'n gedokumenteerde program wat die geïdentifiseerde gevare aanspreek, en sluit dit veilige werkprosedures in om die geïdentifiseerde gevare te mätig, te verminder of te beheer;

"gesondheid- en veiligheidspefsifikasie" 'n gedokumenteerde spesifikasie van alle gesondheids- en veiligheidsvereistes wat met die geassosieerde werke op 'n konstruksieterrein verband hou, ten einde die gesondheid en veiligheid van persone te verseker;

“gevaaridentifisering” die identifisering en dokumentering van bestaande of verwagte gevare vir die gesondheid en veiligheid van persone en wat normaalweg geassosieer word met die tipe konstruksiewerk wat uitgevoer word;

“hangsteier” ‘n werkplaatvorm wat hang aan oorhoofse ondersteuningspunte deur middel van een of meer afsonderlike suspensies vanaf elke ondersteuningspunt;

“hoofkontraakteur” ‘n kontraakteur deur die kliënt aangestel om algemene beheer en bestuur oor ‘n gedeelte van of die hele konstruksie terrein uit te oefen;

“kliënt” ‘n persoon vir wie ‘n projek uitgevoer word, hetsy dit intern of deur ‘n ander persoon uitgevoer word;

“konstruksiewerk” enige werk in verband met-

- (a) die oprigting, instandhouding, verandering, opknapping, herstel, sloping of aftakeling van of aanbouing aan ‘n gebou of enige soortgelyke boukundige konstruksie;
- (b) die installering, oprigting of aftakeling van bedryfstoeusting of masjinerie;
- (c) die konstruksie, instandhouding, sloping of aftakeling van enige brug, dam, kanaal, pad, spoorlyn, straat, aanloopbaan, riool- of waternetwerkstelsel of enige soortgelyke siviele-ingenieurskonstruksie; of
- (d) grondverplasing of skoonmaak van ‘n stuk grond, die maak van ‘n uitgraving, heiwerk, of werk van enige soortgelyke projek;

“kontraakteur” ‘n persoon, insluitende ‘n slegs-arbeid-kontraakteur, wat ‘n ambag, besigheid of ander onderneming bedryf (hetsy vir wins al dan nie) in verband waarmee hy of sy-

- (a) onderneem om konstruksiewerk uit te voer of te bestuur, of self konstruksiewerk uitvoer of bestuur; of
- (b) reël dat ‘n persoon wat onder sy of haar beheer werk (insluitende ‘n werknemer van hom of haar, in die geval waar hy of sy ‘n werkgewer is), konstruksiewerk uitvoer of bestuur; of
- (c) ‘n persoon of persone voorsien om werk vir die kliënt uit te voer;

“materiaalhysmasjiën” ‘n hysmasjiën om materiaal en toerusting op te hys of te laat sak en sluit dit in vrydraende plaatvormhysmasjiëne, mobiele hysmasjiëne, wryfaandrywing-hysmasjiëne, steierhysmasjiëne, tandstang-en-kleinrat-hysmasjiëne en kombinasiehysmasjiëne;

"mediese geskiktheidsertifikaat" 'n sertifikaat wat kragtens hierdie regulasies uitgereik is deur 'n beroepsgeneeskundige of 'n mediese praktisyn, wat albei by die Raad vir Gesondheidsberoepe van Suid-Afrika geregistreer moet wees;

"Nasionale Bouregulasies" die Nasionale Bouregulasies uitgevaardig kragtens artikel 17(1) van die Wet op Nasionale Bouregulasies en Boustandaarde, 1977 (Wet 103 van 1977), gepubliseer ingevolge Goewermentskennisgewing No. R.1081 van 10 Junie 1988, soos gewysig;

"ontwerper" 'n persoon wat 'n ambag, besigheid of ander onderneming bedryf (hetsy vir wins al dan nie) waar hy of sy-

(a) 'n ontwerp voorberei, of

(b) reël dat 'n persoon wat onder sy of haar beheer werk (insluitende 'n werknemer van hom of haar, in die geval waar hy of sy 'n werkgewer is), 'n ontwerp voorberei,

wat op 'n konstruksie of 'n gedeelte van 'n konstruksie betrekking het;

"risiko-evaluering" 'n program om enige risiko of gevaar wat met konstruksiewerk geassosieer word te bepaal ten einde die stappe te identifiseer wat nodig is om sodanige risiko of gevaar uit die weg te ruim, te verminder of te beheer;

"rushoek" die steilste helling van 'n oppervlakte waarby 'n massa los of gefragmenteerde materiaal in 'n stapel op 'n oppervlakte sal bly staan, voordat dit afgly of wegkruimel; die helling sal wissel volgens die plaaslike omgewingstoestande en samestelling van die materiaal;

"SABS 085" die Suid-Afrikaanse Buro vir Standaarde se standaardgebruikskode getiteld "Die ontwerp, oprigting, gebruik en inspeksie van toegang-steierwerk";

"SABS 241" die Suid-Afrikaanse Buro vir Standaarde se standaardspesifikasie getiteld "Water vir huishoudelike voorsiening";

"SABS EN 1808" die Suid-Afrikaanse Buro vir Standaarde se standaardspesifikasie getiteld "Veiligheidsvereistes vir hangende toegangstoerusting – Ontwerpberekeninge, stabiliteitskriteria en konstruksietoetse;

"skoring" 'n struktuur soos 'n metaal hidrouliese, meganiese of hout-/staal-skoringstelsel wat die kante van 'n uitgraving ondersteun en wat ontwerp is om inkalwings te voorkom; en het "skoringstelsel" 'n ooreenstemmende betekenis;

"skiethamer" 'n werktuig wat deur 'n springstoflading geaktiveer word en vir die inslaan van boue, spykers en soortgelyke voorwerpe gebruik word met die doel om 'n aanhegting te voorsien;

"slegs-arbeid-kontrakteur" 'n persoon wat 'n besigheid bedryf (hetsy vir wins al dan nie) waar hy of sy 'n persoon of persone verskaf om werk vir 'n kliënt uit te voer en sodanige persoon of persone deur die slegs-arbeid-kontrakteur vergoed word;

"steier" 'n tydelike verhewe platform en ondersteunende struktuur wat gebruik word vir die verskaffing van toegang na en ondersteuning vir werksmense of materiaal of albei;

"strukture" –

- (a) 'n gebou, staal- of gewapendebetonstruktuur (wat nie 'n gebou is nie), spoorlyn of syspoor, brug, waterwerke, reservoir, pyp of pyplyn, kabel, riool, rioolwerke, gashouer, pad, dreineringswerke, grondwerke, dam, muur, mas, toring, spanmas, ondergrondse tenk, grondkeerstruktuur of 'n struktuur wat ontwerp is om 'n natuurlike verskynsel te bewaar of te verander, en enige ander struktuur tipegelyk aan die voorgaande; of
- (b) enige bekisting, stutwerk, steier of ander struktuur wat ontwerp is of gebruik word om tydens konstruksiewerk ondersteuning te verleen of 'n toegangsmiddel te wees; of
- (c) enige vaste bedryfstoeusting met betrekking tot werk wat installering, ingebruikneming, buitediensstelling of aftakeling behels en waar sodanige werk die risiko inhou dat 'n persoon twee meter of verder kan val;

"stutwerk" 'n struktuur soos 'n metaal, hidrouliese, meganiese of hout/staal-stutwerkstelsel wat die kante van 'n uitgraving steun en ontwerp is om inkalwings te verhoed, en het "stutwerkstelsel" 'n ooreenstemmende betekenis;

"tonnelwerk" die konstruksie van 'n tonnel met 'n deursnit van 1 600 mm of meer en wat onder die natuurlike grondoppervlak gewerk word vir ander doeleindes as dié van die soeke na of winning van 'n mineraal;

"uitgrawingswerk" die maak van 'n mensgemaakte holte, sloot, put of induiking gevorm deur sny-, graaf- of uitskepwerk;

"valbeskermingsplan" 'n skriftelike dokument wat deur 'n bevoegde persoon opgestel en vir 'n spesifieke terrein ontwikkel is en waarin die volgende in ag geneem word:

- (a) maatreëls wat geneem moet word om valgevaar vir werknemers uit te skakel of te verminder;
- (b) redes waarom die gebruik van konvensionele valbeskerming nie prakties is nie of waarom die gebruik daarvan die gevaar sal verhoog; en
- (c) dat plekke waar valbeskermingsmetodes gebruik word, spesifiek as sodanig aangewys moet word en dat slegs werknemers wat toereikend opgelei is, by sodanige plekke mag werk;

“valbeskermingstelsel” ‘n stelsel wat gebruik word om die val van ‘n persoon van ‘n verhewe posisie af te verhoed en kan dit ‘n ankerplek, verbindingsdele, ‘n lyfgordel of lyfharnas insluit, of ook ‘n skouerband, ‘n vertragingstoestel of reddingstou, of kombinasies hiervan, en het ‘n “val-stuittelsel” ‘n soortgelyke betekenis;

“verklaring van metode” ‘n skriftelike dokument wat die sleutel- gesondheids- en veiligheidsaktiwiteite spesifiseer wat uitgevoer moet word om die gevare wat in ‘n gevaar- of risiko-evaluering geïdentifiseer is, sover doenlik te verminder;

“warm toestande” waar die tydbeswaarde gemiddelde WBGT(“wet bulb globe thermometer”)-indeks, wat oor ‘n tydperk van een uur bepaal is, 30 in die omgewing oorskry (sien Omgewingsregulasies vir Werkplekke).

Toepassingsbestek

2.(1) Hierdie regulasies is van toepassing op werkgewers of gebruikers, met inbegrip van hoofkontrakteurs, subkontrakteurs en gevolmagtigdes, persone in eie diens, en werknemers, waar enige konstruksiewerk uitgevoer word.

(2) Hierdie regulasies is nie van toepassing nie op enige konstruksiewerk wat uitgevoer word op ‘n myn, mynwerke of enige werke soos omskryf in die Wet op Myngesondheid en Veiligheid, 1996 (Wet No. 29 van 1996).

(3) Regulasie 3 is nie van toepassing nie op-

- (a) ‘n struktuur met ‘n daktophoogte van ses of minder as ses meter, en ‘n vloer-tot-dak-hoogte van drie of minder as drie meter;
- (b) uitgrawingswerk met ‘n diepte van een of minder as een meter; of

- (c) slopingswerk uitgevoer op 'n hoogte van drie of minder as drie meter: Met dien verstande dat slopingswerk waar plofstof gebruik word, uitgesluit word.

Kennisgewing van konstruksiewerk

3.(1) 'n Kliënt of hoofkontrakteur wat van voorneme is om konstruksiewerk uit te voer, moet, voordat hy of sy sodanige werk uitvoer, op 'n vorm tipegelyk aan Aanhangsel 1 die provinsiale direkteur in kennis stel van-

- (a) die naam en posadres van die hoofkontrakteur;
- (b) die naam en telefoonnommer van die hoofkontrakteur se kontakpersoon;
- (c) die registrasienommer van die hoofkontrakteur se vergoedingsfonds OF van sy of haar gelisensieerde vergoedingsversekeraar;
- (d) die naam en adres van die kliënt;
- (e) die naam en telefoonnommer van die kliënt se kontakpersoon;
- (f) die naam en adres van die argitek of raadgevende ingenieur(s) vir die projek;
- (g) die naam en telefoonnommer van die argitek of raadgevende ingenieur(s) se kontakpersoon;
- (h) die naam en telefoonnommer van die terreinkontakpersoon;
- (i) die presiese fisiese adres van die konstruksierrein of terreinkantoor;
- (j) die aard van die konstruksiewerk;
- (k) die verwagte aanvangsdatum van die konstruksiewerk;
- (l) die verwagte voltooiingsdatum van die konstruksiewerk;
- (m) die verwagte maksimum aantal persone wat op die konstruksierrein sal wees; en
- (n) die beplande aantal subkontrakteurs op die konstruksierrein.

(2) Die hoofkontraakteur moet toesien dat 'n afskrif van die ingevulde Aanhangel 1 op die terrein gehou word vir inspeksie deur 'n inspekteur.

Kliënt

4.(1) Die kliënt moet 'n gedokumenteerde gesondheid- en veiligheidspesifikasie vir die konstruksiewerk opstel en verskaf aan 'n kontraakteur wat 'n bod maak of aangestel word om konstruksiewerk vir die kliënt uit te voer.

(2) Die kliënt moet skriftelik 'n hoofkontraakteur aanstel vir elke fase of projek op 'n konstruksieterrein.

(3) Die hoofkontraakteur moet aan die kliënt 'n gedokumenteerde gesondheid- en veiligheidsprogram wat op die kliënt se gesondheid- en veiligheidspesifikasie gebaseer is, verskaf en demonstreer, en wat vanaf die aanvangsdatum en vir die duur van die konstruksiewerk toegepas moet word.

(4) Die kliënt moet stappe doen om te verseker dat die hoofkontraakteur se gesondheid- en veiligheidsprogram op die terrein geïmplementeer en in stand gehou word: Met dien verstande dat die stappe periodieke oudits insluit wat geskied met tussenposes waaroor die kliënt en hoofkontraakteur onderling ooreengekom het, maar minstens een keer elke drie maande.

(5) Die kliënt moet enige konstruksiewerk wat deur 'n kontraakteur uitgevoer word en nie met die hoofkontraakteur se gesondheid- en veiligheidsprogram vir die terrein ooreenstem nie, of wat 'n gevaar vir die gesondheid en veiligheid van persone inhou, beëindig.

(6) Die kliënt moet toesien dat indien daar ontwerpveranderinge aangebring word, voldoende gesondheids- en veiligheidsinligting aan die hoofkontraakteur beskikbaar gestel word: Met dien verstande dat die kliënt moet toesien dat die hoofkontraakteur genoegsame hulpbronne tot sy beskikking het om sodanige veranderinge uit te voer.

(7) Voordat werk op die terrein begin, moet die kliënt toesien dat elke kontraakteur geregistreer is en van goeie naam en faam by die vergoedingsfonds of by 'n gelisensieerde vergoedingsversekeraar is.

(8) Die kliënt moet toesien dat tenderaars wat tenders indien, voorsiening maak vir die koste van gesondheids- en veiligheidsmaatreëls tydens die konstruksieproses.

Toesig oor konstruksiewerk

5.(1) Elke hoofkontraakteur moet in besit wees van 'n gedokumenteerde gesondheids- en veiligheidsprogram vir die klasse en tipes konstruksiewerk wat

verrig word, en 'n afskrif van sodanige program moet op versoek van 'n werknemer, inspekteur of kliënt beskikbaar wees.

(2) Elke kontrakteur moet 'n voltydse bevoegde werknemer aanstel om oor die uitvoering van die konstruksiewerk toesig te hou.

(3) Geen werknemer aangestel kragtens subregulasie (2), mag toesig hou oor enige konstruksiewerk op of in 'n ander konstruksierrein as die terrein ten opsigte waarvan hy of sy aangestel is nie, met dien verstande dat 'n werknemer aangestel kragtens subregulasie (2), aangestel kan word om oor konstruksiewerk op meer as een konstruksierrein toesig te hou na behoorlike oorweging van die aard en omvang van die konstruksiewerk en van die nabyheid van die konstruksierreine aan mekaar. Met dien verstande dat die aangestelde toesighouer vir 'n minimum van 50% van die tyd in 'n werkdag oor 'n terrein moet toesig hou.

(4) Indien 'n werknemer wat kragtens subregulasie (2) vir meer as een konstruksierrein aangestel is, egter nie na die mening van 'n inspekteur in staat sal wees om voldoende toesig oor die werke te hou nie, kan die inspekteur van die werkgever vereis om die aantal werknemers wat deur die inspekteur aangedui word, aan te stel, of kan die inspekteur die werknemer opdrag gee om die bestaande werknemer wat kragtens subregulasie (2) aangestel is, dienooreenkomstig aan te stel.

(5) Indien die kontrakteur self bevoeg is en self oor die werk toesig hou, hoef die aanstellings bedoel in subartikels 5(2) en (3) nie gedoen te word nie.

(6) (a) Die kontrakteur kan een of meer bevoegde ondergeskikte werknemers aanstel om die aangestelde werknemer bedoel in subregulasie (2) by te staan, en elke sodanige ondergeskikte werknemer moet, in die mate wat duidelik deur die hoofkontrakteur in die aanstellingsbrief omskryf moet word, dieselfde pligte hê as die werknemer wat eerste aangestel is. Met dien verstande dat die aanwysing van sodanige ondergeskikte werknemer nie die aangestelde werknemer bedoel in subregulasie (2), onthef van enige persoonlike aanspreeklikheid vir die versuim van sy toesighoudende pligte bedoel ingevolge hierdie regulasie nie.

(b) Indien die kontrakteur nie 'n ondergeskikte werknemer soos bedoel in subregulasie 5(a) aangestel het nie of, na die mening van die inspekteur, nie 'n genoegsame aantal van sodanige ondergeskikte werknemers aangestel het nie, kan 'n inspekteur van die werknemer vereis om die aantal

ondergeskikte werknemers wat die inspekteur aanwys, aan te stel, en is die bepalings van subregulasie 5(a) ten opsigte van sodanige ondergeskikte werknemers van toepassing asof hulle in die eerste instansie kragtens subregulasie 5(a) aangestel was.

Gevaar- en risiko-evaluerings

6.(1) Elke kontrakteur wat konstruksiewerk doen, moet voor die aanvang van enige konstruksiewerk 'n gevaar-identifisering deur 'n bevoegde persoon laat doen, en die risiko-evaluerings moet deel uitmaak van die gesondheids- en veiligheidsprogram wat op die terrein toegepas word.

(2) Elke kontrakteur wat konstruksiewerk doen, moet voor die aanvang van enige konstruksiewerk 'n risiko-evaluering deur 'n bevoegde persoon laat doen: Met dien verstande dat die risiko-evaluering minstens die volgende moet insluit:

- (a) die identifisering van die gesondheids- en veiligheidsrisiko's en -gevaare waaraan persone blootgestel kan wees;
- (b) die ontleding en evaluering van die geïdentifiseerde gevare;
- (c) 'n gedokumenteerde plan en veilige werksprosedures om die geïdentifiseerde risiko's te matig, te verminder of te beheer; en
- (d) 'n moniterings- en hersieningsplan van die risiko's en gevare.

(3) Die kontrakteur moet toesien dat 'n afskrif van die gevaaridentifisering en risiko-evaluering op die terrein beskikbaar is vir inspeksie deur 'n inspekteur, kliënt, werknemer, werknemersorganisasie, gesondheids- en veiligheidsverteenwoordiger of lid van die gesondheids- en veiligheidskomitee.

(4) Elke kontrakteur moet met die gesondheids- en veiligheidskomitee of, indien daar geen gesondheids- en veiligheidskomitee bestaan nie, met 'n verteenwoordigende groep werknemers, oorleg pleeg oor die ontwikkeling, monitering en hersiening van die gevaaridentifisering en risiko-evaluering.

(5) Die hoofkontrakteur moet voor die aanvang van enige werk en daarna op sodanige tye as wat in die risiko-evaluering bepaal word, toesien dat alle subkontrakteurs deur 'n bevoegde persoon ingelig, opdragte gegee en opgelei word aangaande enige gevaar en die verwante werksprosedures.

(6) Ondanks die vereistes van subregulasie (5) mag geen werkgewer of kontrakteur 'n werknemer toelaat om 'n terrein te betree nie, tensy sodanige persoon gesondheids- en veiligheidsinduksie-opleiding ondergaan het wat

betrekking het op die gevare wat ten tye van die betreding algemeen op die terrein voorkom: Met dien verstande dat alle besoekers aan 'n konstruksieterrein gesondheids- en veiligheidsvoorligting ontvang oor die gevare wat op die terrein voorkom en dat hulle van die nodige persoonlike beskermende toerusting voorsien word.

(7) Elke werknemer op die terrein moet in besit wees van 'n bewys van induksie-opleiding wat voor die aanvang van konstruksiewerk deur 'n bevoegde persoon van die kontrakteur uitgereik is en wat die werknemer by hom of haar moet dra vir die duur van daardie projek of vir die tydperk wat die werknemer op die konstruksieterrein sal wees.

Valbeskerming

7.(1) Die werkgever moet toesien dat 'n valbeskermingsplan opgestel word deur 'n aangestelde persoon wat bevoeg is om dit vir daardie spesifieke terrein te doen, en die plan moet aangepas word na gelang die werk op die terrein vorder.

(2) Die werkgever moet toesien dat enige veranderinge aan die plan goedgekeur word deur die konstruksietoesighouer en die bevoegde persoon wat aangestel is om dit te doen.

(3) Die werkgever moet toesien dat-

- (a) alle onbeskermdde openinge in vloere, rande, luikgate en trappe voldoende beskut, omhein of versper word of soortgelyke middels gebruik word om voorsorg te tref dat 'n persoon nie in sodanige openinge af val nie;
- (b) indien dit nie moontlik is om 'n persoon kragtens die bepalings uiteengesit in subregulasie (3)(a) te beveilig nie, die werknemer van 'n geskikte valbeskermingstelsel voorsien word en voldoende opleiding by die werkgever kry in die gebruik van sodanige valbeskermingstelsel; en
- (c) kennisgewings opsigtelik geplaas word by alle openinge waardeur 'n persoon maklik kan val.

Dakwerk

8.(1) Die werkgewer moet toesien dat alle dakwerk behoorlik beplan word en te alle tye onder behoorlike toesig van 'n bevoegde persoon is.

(2) Die werkgewer moet toesien dat alle werknemers wat dakwerk doen, fisies en sielkundig geskik is om op hoogtes te werk.

(3) Geen werkgewer mag van 'n persoon vereis of hom of haar toelaat om enige dakwerk te doen tydens gure weer of waar weerstoestande 'n gevaar vir die gesondheid en veiligheid van werknemers inhou nie.

(4) Indien daar van 'n werknemer vereis word om werk op of naby die rand van 'n dak uit te voer, moet die werkgewer toesien dat voldoende voorsorgmaatreëls in belang van die gesondheid en veiligheid van sodanige werknemer getref is.

(5) Die werknemer moet toesien dat alle bedekkings van enige openinge op die dak van 'n stewige konstruksie is, en te alle tye wanneer werknemers werk op die dak verrig, in posisie vasgemaak is.

(6) Geen werkgewer mag van 'n persoon vereis of hom of haar toelaat om oor breekbare materiaal waardeur hy of sy maklik kan val, te beweeg of daarop of van daar af te werk nie, tensy-

- (a) geskikte en genoegsame platforms, bedekkings of ander soortgelyke maniere van ondersteuning voorsien en so gebruik word dat die gewig van 'n persoon wat aldus beweeg of werk, ondersteun word;
- (b) geskikte skutrelings van minstens 900 mm hoog voorsien word om te voorkom dat persone van platforms af val; en
- (c) opvallende waarskuwingskennisgewings aangebring word by die aanloop na die plek waar die breekbare materiaal geleë is.

Strukture

9.(1) Die hoofkontrakteur moet toesien dat-

- (a) alle redelik uitvoerbare stappe gedoen word om die onbeheerbare ineenstorting te verhoed van enige nuwe of bestaande struktuur of enige deel daarvan wat onstabiel kan raak of in 'n tydelike toestand van swakheid of onstabiliteit is vanweë die uitvoering van konstruksiewerk;

- (b) geen struktuur of deel van 'n struktuur sodanig gelaai word dat dit vir 'n persoon onveilig gemaak word nie; en
 - (c) enige beer, tydelike ondersteuning of tydelike struktuur wat as ondersteuning gebruik word vir 'n permanente struktuur of struktuur wat in aanbou is, slegs onder die toesig van 'n bevoegde persoon ontwerp en opgerig, verander of afgetakel mag word.
- (2) Die ontwerper van 'n struktuur moet alle tersaaklike inligting oor die ontwerp wat die konstruksiewerk mag beïnvloed, aan die hoofkontraakteur beskikbaar stel.
- (3) Behoudens subregulasie (2), moet die ontwerper verseker dat die volgende inligting in sy of haar verslag ingesluit word en aan die hoofkontraakteur beskikbaar gestel word:
- (a) 'n geotegniese verslag;
 - (b) die ontwerplas van die struktuur; en
 - (c) die metodes en volgorde van konstruksie.
- (4) Die ontwerper of argitek van die struktuur moet die hoofkontraakteur skriftelik inlig oor enige bekende of verwagte gevare of risiko's of spesiale maatreëls wat nodig is vir die veilige uitvoering van die werk soos dit ontwerp of daarna verander is.
- (5) Die hoofkontraakteur is verantwoordelik vir die veilige uitvoering van alle werke en moet die ingenieur, die argitek en enige tersaaklike subkontraakteur voorsien van 'n konstruksieprogram asook 'n verklaring van metode met die nodige besonderhede en prosedures wat die toereikendheid en geskiktheid vir die uitvoering van die werke demonstreer.
- (6) Die ontwerper of argitek van die struktuur mag niks in die ontwerp insluit wat die gebruik van gevaarlike strukturele of ander prosedures of materiale wat 'n gevaar vir gesondheid en veiligheid inhou, sal noodsaak nie en wat deur ontwerp wysigings of die gebruik van substituum materiale vermy kan word nie.
- (7) Die ontwerper of argitek moet veiligheidsprobleme in verband met daaropvolgende instandhouding en onderhoud in ag neem, indien instandhouding en onderhoud spesiale gevare inhou, en die ontwerp moet voorsiening maak vir fasiliteite om sodanige werk met die minimum risiko uit te voer.

Bekisting en steunwerk

10.(1) Die werkgewer moet toesien dat alle bekisting- en steunwerkoperasies uitgevoer word onder die toesig van 'n bevoegde persoon wat skriftelik aangestel is.

(2) Die gebruiker of werkgewer moet toesien dat alle bekisting en steunwerk toereikend ontwerp, opgerig, ondersteun, verspan en in stand gehou word sodat dit in staat sal wees om alle verwagte vertikale en sylasse wat redelikerwys op die bekisting en steunwerk aangewend kan word, te ondersteun. Die omvang van die ontwerp moet gepas wees vir die taak.

(3) Behoudens subregulasie (1) moet die gebruiker of werkgewer verseker dat alle bekisting onder die toesig van 'n bevoegde persoon ondersoek, opgerig en afgetakel word.

(4) Die gebruiker of werkgewer moet toesien dat alle tekeninge wat op die ontwerp van die bekisting of steunwerk betrekking het, op die terrein gehou word en op versoek van 'n inspekteur beskikbaar gestel word.

(5) Die gebruiker of werkgewer moet verseker-

(a) dat alle masjinerie en toerusting wat in die bekisting- of steunwerkstruktuur gebruik word, voor gebruik sorgvuldig vir geskiktheid ondersoek en nagegaan word;

(b) dat, behoudens subregulasie (1), alle masjinerie en toerusting wat gebruik word, onmiddellik voor, gedurende en na die gooi van beton geïnspekteer word;

(c) dat enige skoringstoerusting wat na oprigting in so 'n mate beskadig of verswak bevind word dat die integriteit daarvan beïnvloed word, onmiddellik versterk moet word;

(d) dat die veiligheid van werknemers sover doenlik gehandhaaf word indien vertikale bekisting bogronds of op bladhoogte gedoen word, en indien toegangsplatforms vir roetinetake voorsien moet word;

(e) dat toereikende voorsorgmaatreëls getref word om dekpanele teen verskuiwing vas te heg en sodoende te verhoed dat 'n persoon deur die bladbekisting val;

(f) dat toereikende voorsorgmaatreëls getref word om te verhoed dat 'n persoon op steunwerk of bekisting gly vanweë die aanwending van bekisting- of steunwerk-loslaatmiddels; en

- (g) dat die gesondheid van 'n persoon, sover doenlik, nie aangetas word deur die gebruik van oplosmiddels of olies of enige ander soortgelyke substansies nie.
- (6) Die werkgewer moet deur middel van lere of trappe veilige toegang voorsien vir alle werk wat bokant dravlak uitgevoer moet word en vir instandhoudings- en opknappingswerk, asook vir oprigting en aftakeling van bekisting of stutwerk.
- (7) Die werkgewer moet toesien dat-
 - (a) alle werknemers wat bekisting met die hand of met self-bediende windastoestelle of meganiese middele moet verskuif, voldoende opleiding en aanwysings ontvang om hierdie operasies veilig uit te voer;
 - (b) 'n bevoegde persoon wat skriftelik aangestel is, bekisting- of steunwerkinspeksies uitvoer, en dat, behoudens subregulasie (5)(b), die resultate van elke inspeksie aangeteken word in 'n register wat op versoek aan 'n inspekteur beskikbaar gestel moet word; en
 - (c) dat alle werknemers wat bekisting of steunwerk oprig of aftakel, wel bevoeg is om dit te doen.

Steierwerk

11.(1) Elke gebruiker van toegangsteierwerk en gepaardgaande masjinerie en toerusting moet toesien dat sodanige toerusting, wanneer dit gebruik word, aan 'n veiligheidstandaard voldoen wat vir hierdie doel in hierdie regulasies ingelyf is ingevolge artikel 44 van die Wet.

(2) Die werkgewer moet toesien dat alle steierwerkoperasies uitgevoer word onder toesig van 'n bevoegde persoon wat skriftelik aangestel is, en moet verseker dat alle steierwerk-oprigters, steierwerk-spanleiers en steierwerk-inspekteurs bevoeg is om die werk uit te voer.

Hangsteiers

12.(1) Die werkgewer moet toesien dat alle hangsteierwerk-operasies uitgevoer word onder toesig van 'n bevoegde persoon wat skriftelik aangestel is. Verder moet die werkgewer verseker dat alle hangsteier-oprigters, hangsteier-operateurs en hangsteier-inspekteurs bevoeg is om die werk uit te voer.

(2) Geen gebruiker mag 'n hangsteier gebruik of toelaat dat dit gebruik word nie, tensy-

- (a) die ontwerp, stabiliteit en konstruksie daarvan aan die veiligheidstandaard voldoen wat vir hierdie doel in hierdie regulasies opgeneem is ingevolge artikel 44 van die Wet; en
 - (b) die gebruiker in besit is van 'n magtigingsertifikaat wat vir die gebruik van hangsteierwerk uitgereik is deur 'n geregistreerde professionele ingenieur of geregistreerde gediplomeerde ingenieur.
- (3) Die gebruiker van 'n hangsteier moet voor die aanvang van werk aan die tersaaklike provinsiale direkteur van die Departement van Arbeid 'n afskrif van die magtigingsertifikaat uitgereik kragtens subregulasie (2)(b), asook van die ontwerpberkening en sketse stuur, en moet ook die volgende indien:
- (a) die naam en adres van die gebruiker van die hangsteier;
 - (b) die fisiese adres van die plek waar die hangsteier gebruik word;
 - (c) die naam en adres van die kliënt;
 - (d) die verwagte aanvangsdatum van gebruik;
 - (e) die verwagte verstrykingsdatum van gebruik;
 - (f) beskrywing van die gebruik van die hangsteier;
 - (g) die naam van die aangestelde bevoegde persoon; en
 - (h) die ontwerpvermoë van die platform.
- (4) Die werkgewer moet toesien dat die kraanbalke van elke hangsteier-
- (a) van staal of enige ander materiaal van gelyke sterkte gemaak is en 'n veiligheidsfaktor van minstens vier het in verhouding tot die las wat dit moet dra;
 - (b) 'n oorhang van hoogstens 1,8 m verby die kant van die struktuur het en so lank is dat die teenwerkende lengte stewig geanker kan word;
 - (c) anders as deur middel van gewigte aan die binne-ente, behoorlik gestut, paslik gespaseer en stewig geanker is. Met dien verstande dat 'n inspekteur, by ontvangs en evaluering van die verlangde inligting soos bedoel in subregulasie (3), toestemming kan verleen dat kraanbalke deur middel van gewigte geanker mag word; en

- (d) van 'n stop- en ander doeltreffende toestelle aan die buite-ente voorsien is om die verskuiwing van toue te voorkom.

(5) Die werkgewer moet toesien dat die gedeeltes van die gebou en struktuur waarop die kraanbalke ondersteun word, deur middel van berekeninge gekontroleer word om te verseker dat daar, sonder risiko of skade aan die gebou of struktuur, aan die vereiste veiligheidsfaktor voldoen word.

- (6) Die werkgewer moet toesien dat-

- (a) die werkplatform van elke hangsteier hang aan-

- (i) kantrolblokke, katrolwiele, windasse of hysmasjiene van die korrekte grootte vir die toue wat gebruik word;

- (ii) minstens twee onafhanklike staalkabels in die geval van 'n werkplatform wat hoogstens 912 mm breed is, en minstens vier onafhanklike staalkabels in die geval van 'n werkplatform wat 912 mm en breër is; en

- (iii) staalkabels met 'n veiligheidsfaktor van minstens tien ten opsigte van die maksimum vrag wat elke kabel moet dra; en

- (b) benewens die hangstaalkabels bedoel in subregulasie (6)(b), veiligheidskabels gemaak van staalkabels van dieselfde deursnit as die hangkabel, en sekondêre remtoestelle geïnstalleer word om die platform in plek te hou in geval die hysmasjiens of hysmasjiene onklaar raak; en

- (c) die hangstaalkabel en die veiligheidstaalkabel afsonderlik aan die kraanbalke vas is of, ALTERNATIEWELIK, indien veiligheidskabels nie voorsien word nie, dat elke operateur voorsien word van gepaste val-stuittoeestelle wat aan onafhanklike ankerpunte aan die struktuur van die gebou vasgemaak moet wees.

- (7) Die werkgewer moet toesien dat-

- (a) die hand- of kragaanaangedrewe masjinerie wat vir die ophang of neerlaat van die werkplatform van 'n hangsteier gebruik word, so gebou en in stand gehou word dat daar geen ongekontroleerde beweging van die werkplatform kan voorkom nie;

- (b) die masjinerie bedoel in paragraaf (a) so geplaas word dat dit maklik bereikbaar is vir inspeksie;

- (c) die kabelverbindings met die kraanbalke vertikaal bokant die verbindings met die werkplatforms is; en
 - (d) in die geval waar die werkplatform slegs deur twee kables gesuspendeer word, die verbindings van die kables met die werkplatform van so 'n hoogte bo die vlak van die werkplatform is dat dit die stabiliteit van die werkplatform verseker.
- (8) Die werkgewer moet toesien dat die werkplatform van elke hangsteier-
- (a) minstens 456 mm breed en 1,8 m lank is;
 - (b) so na as moontlik aan die struktuur waaraan gewerk word moet hang en dat dit, behalwe waar ligte werk gedoen word, by elke werksposisie vasgemaak word om horisontale beweging tussen die werkplatform en die struktuur te voorkom;
 - (c) aan alle kante, behalwe aan die kant teenoor die struktuur, van stewige onderste skutrelings van tussen 400 mm en 500 mm in hoogte, en boonste skutrelings van tussen 900 mm en 1000 mm in hoogte bokant die werkplatform voorsien is: Met dien verstande dat, in die geval van 'n werkplatform wat slegs aan twee kables hang, die skutrelings aan alle kante moet wees;
 - (d) vanaf die vlak van die werkplatform aan alle kante van toonborde wat minstens 150 mm hoog is, voorsien is en so vasgesit is dat daar geen oop ruimte tussen die toonborde en die werkplatform bestaan nie: Met dien verstande dat indien die toonborde van hout gemaak is, hulle minstens 25 mm dik moet wees;
 - (e) toegerus is met ankerpunte waaraan operateurs die skouerband van die veiligheidsgordel of -harnas wat die operateur dra of gebruik, moet vasmaak, tensy die val-stuutstelsel soos bedoel in subregulasie (6)(c), gebruik word; en
 - (f) toegerus is met 'n opsigtelike kennisgewing wat die veilige werkklas in kg aandui.
- (9) Die gebruiker moet die hele installasie en alle werkende dele van die hangsteier deeglik laat ondersoek en laat onderwerp aan 'n prestasietoets soos voorgeskryf deur die standaard waarvolgens die hangsteier vervaardig is, deur 'n bevoegde persoon wat die kennis en ondervinding het van die oprigting en instandhouding van 'n hangsteier of soortgelyke masjinerie en wat telkens die diensbaarheid van die strukture, kables, masjinerie en veiligheidstoestelle tydens oprigting moet bepaal voordat hulle gebruik word: Met dien verstande dat 'n

prestasietoets van die hele installasie van die hangsteier onderwerp moet word aan 'n las wat gelyk is aan dié voorgeskryf deur die vervaardiger of, in die afwesigheid van 'n bekende las, aan 'n las van 110 persent van die aangeslane massalas, met tussenposes van hoogstens 12 maande en op so 'n wyse dat elke deel van die installasie aan soortgelyke spanning onderwerp word.

(10) Ondanks die bepalings van subregulasie (9) moet die gebruiker toesien dat 'n persoon bedoel in subregulasie (9), elke hyskabel en elke haak of ander lashegtoestel wat deel van die hangsteier uitmaak, deeglik na oprigting en voor gebruik ondersoek, en met tussenposes van hoogstens 6 maande in gevalle van deurlopende gebruik.

(11) Die gebruiker moet toesien dat die resultate van die ondersoeke en toetse voorgeskryf in subregulasies (9) en (10), deur die persoon wat sodanige ondersoeke en toetse uitvoer, aangeteken en onderteken word in 'n rekordboek wat te alle tye op die terrein gehou moet word.

(12) Die werkgewer moet toesien dat-

- (a) alle operateurs wat op 'n hangsteier moet werk, in besit is van 'n mediese geskiktheidsertifikaat uitgereik deur 'n beroepsgeneeskundige; en
- (b) alle operateurs wat op hangsteierwerk moet werk, bedrewe is in die veilige bediening van die toerusting, en dat operateursopleiding die volgende insluit, maar nie daartoe beperk is nie:
 - (i) betreding van en afklim van die platform af;
 - (ii) bediening van die kontrolemiddels en veiligheidstoestelle, en die verkeerde gebruik van sodanige veiligheidstoestelle;
 - (iii) prosedures wat gevolg moet word in geval van nood of wanfunksionering van die toerusting of enige vermoedelike defek; en
 - (iv) onderrig oor die behoorlike gebruik van die veiligheidsgordels of vangtoerusting.

(13) Die gebruiker moet toesien dat 'n persoon wat bevoeg is om hangsteierwerk te installeer en in stand te hou, al die toerusting daaglik voor gebruik ondersoek en die resultate aanteken, en dat daar tydens die daaglikse ondersoeke onder andere nagegaan word of-

- (a) hoofverbindingsboute en andere vas is;

- (b) veiligheidstoestelle nie verniel word nie;
- (c) die veilige werkklas van platforms nie oorskry word nie;
- (d) die operateur 'n veiligheidsgordel of val-stuutstelsel gebruik;
- (e) daar geen sigbare tekens van metaaltamheid in die toerusting is nie; en
- (f) daar geen operatorsprobleem aangemeld is nie.

(14) Indien die kraanbalk beweeg moet word, moet die gebruiker verseker dat slegs persone wat opgelei en bevoeg is om so 'n verandering te bewerkstellig, hierdie taak uitvoer en dat 'n inspeksie deur die bevoegde persoon uitgevoer en resultate aangeteken word voor die hergebruik van die hangsteierwerk.

(15) Die gebruiker moet toesien dat die hangsteierwerk na gebruik aan die einde van die werkdag geïsoleer word en dat geen deel van die hangsteierwerk daarna 'n gevaar vir enige persoon sal inhou nie.

Uitgrawingswerk

13.(1) Die hoofkontraakteur moet toesien dat die stabiliteit van die grond skriftelik deur 'n bevoegde persoon geverifieer word alvorens daar met uitgrawingswerk begin word.

(2) Die werkgewer moet toesien dat alle uitgrawingswerk uitgevoer word onder die toesig van 'n bevoegde persoon wat skriftelik aangestel is.

(3) Elke werkgewer wat uitgrawingswerk verrig-

- (a) mag nie vereis of toelaat dat enige persoon werk, en niemand mag werk nie, onder ongestutte oorhangende materiaal wat nie toereikend geskoor of verspan is nie: Met dien verstande dat skoring en verspanning nie nodig sal wees nie indien die kante van die uitgrawings afgeskuins is tot minstens die maksimum rushoek, gemeet in verhouding tot die horisontale vlak, of indien so 'n uitgrawing in stabiele materiaal plaasvind, onderworpe daaraan dat toestemming skriftelik deur die aangestelde bevoegde persoon verleen word;
- (b) moet stappe doen om te verseker dat enige ondersteuning, skoring of verspanning bedoel in paragraaf (a), so ontwerp en gebou word dat dit sterk genoeg is om die oorhangende materiaal of die kante van die betrokke uitgrawing te ondersteun;

- (c) moet toesien dat geen materiaal, voertuig of masjinerie en toerusting binne 1,5 m vanaf die rand van 'n uitgrawing geplaas word waar dit waarskynlik die instorting daarvan sal veroorsaak nie: Met dien verstande dat, onderworpe aan toestemming wat skriftelik deur 'n toepaslik gekwalifiseerde geregistreerde professionele ingenieur verleen word, toerusting of masjinerie nader aan die rand van 'n uitgrawing geskuif kan word slegs waar die uitgrawing voldoende verspan of geskoor is;
- (d) moet toesien dat indien die stewigheid van 'n aangrensende gebou, struktuur of pad waarskynlik deur die maak van 'n uitgrawing geraak sal word, die nodige stappe gedoen word om die stewigheid van sodanige gebou, struktuur of pad en die veiligheid van persone te verseker;
- (e) moet toesien dat geen uitgrawingswerk uitgevoer word nie tensy geskikte en doeltreffende stappe gedoen is om enige gevaar van besering wat uit enige ondergrondse kabel of ander ondergrondse diens voortspruit, te identifiseer en, sover doenlik, te voorkom;
- (f) moet toesien dat 'n gerieflike en veilige wyse van toegang verskaf word tot elke uitgrawing waarin persone moet werk: Met dien verstande dat, in die geval van 'n uitgrawing wat langer 12 m is, 'n veilige wyse van toegang met tussenspases van hoogstens 12 m verskaf moet word;
- (g) moet, sover doenlik, vasstel wat die ligging en aard van elektrisiteit, water, gas of ander soortgelyke dienste is wat op een of ander manier geraak kan word deur die werk wat gedoen gaan word, en moet voor die aanvang van die uitgrawingswerk wat enige sodanige diens kan raak, die stappe doen wat onder die omstandighede nodig mag wees om alle betrokke persone te beveilig;
- (h) moet elke uitgrawing, insluitende alle verspanning en skoring -
 - (i) daaglik voor elke skof;
 - (ii) na elke skietoperasie;
 - (iii) na 'n onverwagse grondstorting;
 - (iv) na beduidende skade aan stutte; en
 - (v) na reën,

laat inspekteer deur 'n bevoegde persoon wat die veiligheid van die uitgrawing moet verklaar ten einde die veiligheid van persone te

verseker, en die resultate moet in 'n register aangeteken word en op versoek aan 'n inspekteur beskikbaar gestel word;

- (i) moet toesien dat elke uitgraving wat vir die publiek toeganklik is of aan openbare paaie of deurgange grens, of wat die veiligheid van persone kan bedreig-

- (i) voldoende beskerm word deur 'n versperring of heining van minstens een meter hoog en so na aan die uitgraving as wat veilig en prakties uitvoerbaar is; en

- (ii) snags of wanneer sigbaarheidstoestand swak is, van waarskuwingsligte of enige ander duidelik sigbare grensaanwysers voorsien word.

- (j) moet toesien dat alle voorsorgmaatreëls soos bepaal vir beperkte ruimtes (Algemene Veiligheidsregulasie 5), nagekom word wanneer 'n uitgraving binnegegaan word;

- (j) moet toesien dat, indien die uitgrawingswerk die gebruik van plofstowwe behels, 'n verklaring van metode opgestel word deur 'n persoon wat bedrewe is in die gebruik van plofstowwe vir uitgrawingswerk en dat die prosedures daarin gevolg word; en

- (k) moet waarskuwingstekens laat aanbring langs 'n uitgraving waarin persone besig is met werk, inspeksie of toetse.

Slopingswerk

14.(1) Voordat enige slopingswerk uitgevoer word, moet die hoofkontraakteur of subkontraakteur 'n gedetailleerde opname van die struktuur wat gesloop moet word laat doen ten einde die metode van slooping te bepaal.

(2) Die kontraakteur moet 'n bevoegde persoon skriftelik aanstel om toesig te hou oor en beheer uit te oefen oor alle slopingswerk op die terrein.

(3) Die strukturele integriteit van die struktuur moet gedurende die slooping en soos in die verklaring van metode bepaal, met gereelde tussenposes deur 'n bevoegde persoon gekontroleer word ten einde voortydige instorting te verhoed.

- (4) Elke werkgewer wat slopingswerk verrig-

- (a) moet, ten opsigte van 'n struktuur wat gesloop word, stappe doen om te verseker dat-

- (i) geen vloer, dak of ander deel van die struktuur so met puin of materiaal oorlaai word dat dit onveilig gemaak word nie;
 - (ii) alle prakties moontlike voorsorgmaatreëls getref word ter voorkoming van die instorting van die struktuur wanneer 'n deel van die raamwerk van 'n geraamde of gedeeltelik geraamde gebou verwyder word, of wanneer gewapende beton deurgekap word; en
 - (iii) voorsorgmaatreëls getref word deur middel van voldoende skoring of sodanige ander middels as wat nodig is om die onopsetlike instorting van enige deel van die struktuur of van enige aangrensende struktuur te voorkom;
- (b) mag nie vereis of toelaat dat enige persoon werk, en niemand mag werk nie, onder oorhangende materiaal wat nie voldoende geskoor of verspan is nie;
 - (c) moet stappe doen om te verseker dat enige stut, skoring of verspanning bedoel in paragraaf (b), so ontwerp en vervaardig is dat dit sterk genoeg is om die oorhangende materiaal te ondersteun;
 - (d) moet, indien die stewigheid van 'n aangrensende gebou, struktuur of pad waarskynlik deur slopingswerk van 'n struktuur geraak gaan word, sodanige stappe doen as wat nodig is om die stabiliteit van so 'n struktuur of pad en die veiligheid van die persone te verseker;
 - (e) moet, sover doenlik, vasstel wat die ligging en aard van elektrisiteits-, water-, gas- of ander soortgelyke dienste is wat op enige wyse geraak kan word deur die werk wat gedoen gaan word, en moet voor die aanvang van die slopingswerk wat enige sodanige diens kan raak, die stappe doen wat onder die omstandighede nodig kan wees om alle betrokke persone te beveilig;
 - (f) moet toesien dat elke trapkuil en elke vloer waar werk verrig word in 'n gebou wat gesloop word, voldoende verlig is deur natuurlike of kunsmatige middele;
 - (g) moet toesien dat gerieflike en veilige toegangsmiddele voorsien word na elke sloopingsterrein waar persone moet werk; en
 - (h) moet toesien dat enige slopingswerk wat vir die publiek toeganklik is of aan openbare paaie of deurgange grens, of waardeur die

veiligheid van persone bedreig kan word, toereikend beskerm moet word deur 'n stewige versperring of omheining en gepaste tekens.

(5) Die werkgewer moet toesien dat geen materiaal op enige plek buite die buitemure van die struktuur laat val word nie, tensy die gebied doeltreffend beskerm is.

(6) Die werkgewer moet toesien dat elke glygeut wat vir die verwydering van puin gebruik word, so ontwerp word dat puin nie vry val nie en die geut sterk genoeg is om die krag van die puin wat in die glygeut afbeweeg, te weerstaan.

(7) Die werkgewer moet toesien dat meganiese toerusting nie op vloere of werkoppervlakke gebruik word nie tensy sodanige vloere of oppervlakke van toereikende sterkte is om die laste wat opgelê word, te ondersteun.

(8) Indien die risiko-evaluering die teenwoordigheid van asbes aandui, moet die werkgewer verseker dat alle asbeswerk uitgevoer word ooreenkomstig die Asbesregulasies, gepubliseer ingevolge Goewermentskennisgewing R. 773 van 10 April 1987.

(9) Indien die risiko-evaluering die teenwoordigheid van lood aandui, moet die werkgewer verseker dat alle loodwerk uitgevoer word ooreenkomstig die Loodregulasies, gepubliseer ingevolge Goewermentskennisgewing R. 586 van 22 Maart 1992.

(10) Waar die slopingswerk die gebruik van plofstof behels, moet 'n verklaring van metode opgestel word deur 'n persoon wat vaardig is in die gebruik van plofstowwe vir slopingswerk, en moet die prosedures in die verklaring gevolg word.

(11) Die werkgewer moet 'n vangplatform of net aanbring bokant die ingang of gang of bokant 'n plek waar persone werk of loop, of die gevaargebied afkamp indien werk verrig word bokant sodanige ingang, gang, plek of gebied waar daar die gevaar of moontlikheid bestaan dat persone deur vallende voorwerpe getref kan word.

Konstruksiefasiliteite

15.(1) Ondanks die konstruksiebepalings van die Fasiliteiteregulasies gepubliseer ingevolge Goewermentskennisgewing R. 1593 van 12 Augustus 1988, moet die werkgewer by of binne redelike bereik van elke konstruksierrein die volgende skoon fasiliteite voorsien en in stand hou, afhangende van die aantal werkers en die duur van die werk:

- (a) stortgeriewe (minstens een vir elke 15 werkers);
- (b) sanitêre geriewe (minstens een vir elke 30 werkers);
- (c) kleedkamergeriewe; en
- (d) beskutte eetgebiede;

(2) Die werkgewer moet geskikte verblyf voorsien, in ooreenstemming met die bepalings van die Nasionale Bouregulasies, vir die werkers by konstruksieterreine wat ver van hul tuistes af is en vir wie daar nie toereikende vervoer tussen die terrein en hul tuistes, of enige ander geskikte verblyf beskikbaar is nie.

Materiaalhysmasjiene

16.(1) Die gebruiker moet toesien dat elke materiaalhyssmasjien en sy toring goed en van duursame materiaal gemaak is, sterk genoeg en vry van defekte is, en oor die algemeen volgens algemeen aanvaarde tegniese standaarde gemaak is.

(2) Die gebruiker moet toesien dat die toring van elke materiaalhyssmasjien-

- (a) aan die struktuur vasgemaak moet wees of met staalkabel-ankeroue verspan is en so 'n afstand bokant die hoogste uittreeplank strek dat 'n vry en onversperde ruimte van minstens 900 mm vir oorhysing toegelaat word;
- (b) aan die sye aan die onderkant en by alle vloere waar persone deur bewegende dele van die hysmasjiene getref kan word, behalwe aan die kant of kante wat toegang tot die vervoermiddel verleen, ingesluit is deur mure of ander doeltreffende middele tot op 'n hoogte van minstens 2100 mm vanaf die grond- of vloervlak; en
- (c) by elke uittreeplank voorsien is van 'n deur of hek van minstens 1800 mm hoog, en dat sodanige deur of hek toegehou moet word behalwe wanneer die vervoermiddel by so 'n uittreeplank stilstaan.

(3) Die gebruiker van 'n materiaalhyssmasjien moet toesien dat daar kennisgewings of tekens wat die ongemagtigde toegang van persone verbied, in opsigtelike plekke by die basis van die toring aangebring word.

(4) Die gebruiker moet toesien dat-

- (a) die platform van elke materiaalhyshumasjien so ontwerp is dat dit die vragte wat vervoer moet word, veilig kan dra, en dat die gesamentlike gewig van die platform en die vrag nie die ontwerpde hysvermoë van die hysumasjien oorskry nie;
 - (b) die hyskabel van elke materiaalhyshumasjien wat 'n afstand-windas het, doeltreffend beskerm word teen skade deur enige eksterne oorsaak op die deel van die hyskabel tussen die windas en die toring van die hysumasjien; en
 - (c) elke materiaalhyshumasjien voorsien word van 'n doeltreffende rem wat die vermoë het om die rytuig met sy maksimum vrag in enige posisie te hou wanneer daar nie krag aan die hysumasjinerie voorsien word nie.
- (5) Geen gebruiker mag vereis of toelaat dat stootwaens, kruise waens of materiaal op of in die vervoermiddel van 'n materiaalhyshumasjien vervoer word nie, en geen persoon mag stootwaens, kruise waens of materiaal aldus vervoer nie, tensy bedoelde stootwaens, kruise waens of materiaal sodanig vasgemaak of ingesluit is dat verskuiwing daarvan nie gedurende vervoer kan plaasvind nie.
- (6) Die gebruiker moet toesien dat 'n kennisgewing wat die maksimummassa-vrag aandui wat op enige bepaalde tydstip gedra kan word, en wat persone verbied om op die platform van die materiaalhyshumasjien te ry, by alle aanlope tot die hysumasjien en by elke uitreeplank aangebring word.
- (7) Die gebruiker van 'n materiaalhyshumasjien mag nie 'n persoon vra of toelaat om so 'n hysumasjien te bedien nie, tensy die persoon vaardig is met die bediening daarvan.
- (8) Geen gebruiker mag 'n persoon vra of toelaat om op 'n materiaalhyshumasjien te ry nie.
- (8) Die gebruiker moet toesien dat elke materiaalhyshumasjien minstens een keer elke week ondersoek word deur 'n bevoegde persoon met ondervinding in die oprigting en instandhouding van materiaalhyshumasjiene of soortgelyke masjinerie, en wat die diensbaarheid van die materiaalhyshumasjien in sy geheel, met inbegrip van leispore, kables en hul verbindings, tromme, katrolwiele of katrolle en alle veiligheidstoestelle moet bepaal, en welke persoon die resultaat van elke sodanige ondersoek moet aanteken en onderteken in 'n rekordboek wat vir daardie doel op die terrein gehou moet word.

Caissons en kofferdamme

17.(1) Elke werkgewer moet toesien dat-

- (a) elke caisson of kofferdam en deel daarvan van geskikte ontwerp en konstruksie is, en van geskikte en duursame materiaal vervaardig is en van toereikende sterkte en vermoë is vir die doel waarvoor dit gebruik moet word, en dat dit behoorlik in stand gehou word; en
- (b) die konstruksie, installering, verandering of aftakeling van 'n caisson of kofferdam onder die toesig van 'n bevoegde persoon gedoen word.

Skiethamers

18.(1) Geen gebruiker mag 'n skiethamer gebruik of toelaat dat enige persoon dit gebruik nie, tensy-

- (a) dit rondom die bek daarvan voorsien is van 'n skerm wat enige vlieënde stukkie of deeltjies doeltreffend inperk;
- (b) die vuurmeganisme so ontwerp is dat die skiethamer nie sal werk nie, tensy-
 - (i) dit teen die oppervlak gehou word met 'n krag van minstens twee keer die gewig van die skiethamer; en
 - (ii) die hellingshoek van die loop tot die werksoppervlakte hoogstens 15 grade van 'n reghoek is:

Met dien verstande dat die bepalings van hierdie subregulasie nie van toepassing is nie op skiethamers ten opsigte waarvan die energie van die patroon na die boue, spykers of soortgelyke tersaaklike voorwerpe oorgedra word deur middel van 'n tussengangsuier met 'n beperkte beweegafstand.

- (2) Die gebruiker van 'n skiethamer moet toesien dat-
 - (a) slegs patrone gebruik word wat geskik is vir die skiethamer en die werk wat verrig moet word;
 - (b) die skiethamer na gebruik deur 'n aangestelde persoon skoongemaak en ondersoek word so dikwels as wat dit vir die veilige werking daarvan nodig mag wees;
 - (c) die veiligheidstoestelle voor gebruik in 'n behoorlik werkende toestand is;

- (d) die skiethamer en die patrone in 'n veilige plek wat nie vir 'n ongemagtigde persoon toeganklik is nie, toegesluit word wanneer dit nie in gebruik is nie;
 - (e) die skiethamer nie geberg word terwyl dit gelaai is nie;
 - (f) 'n waarskuwingskennisgewing aangebring word waar die skiethamer ook al gebruik word;
 - (g) patrone en spykers/tapboute skriftelik deur 'n aangestelde persoon gekontroleer en uitgereik word;
 - (h) die uitreik van patrone en spykers/tapboute in 'n register aangeteken word en dat die ontvanger vir die ontvangs daarvan teken; en
 - (i) alle leë en ongebruikte patrone teruggee en teruggeteken word in die register soos in subregulasie (2)(h) hierbo.
- (3) Geen gebruiker mag toelaat of vereis dat enige persoon 'n skiethamer gebruik nie, tensy so 'n persoon-
- (a) voorsien is van en gebruik maak van geskikte beskermende toerusting; en
 - (b) onderrig is in die bediening, instandhouding en gebruik van 'n skiethamer.

Lotmengers

19.(1) Die gebruiker van masjinerie moet toesien dat aangestelde bevoegde persone alle lotmengers bedien en daarvoor toesig hou.

(2) Die gebruiker moet toesien dat 'n risiko-evaluering gedoen word en dat voldoende inligting gesondheids- en veiligheidsgevaar wat uit sodanige aktiwiteit voortspruit, aan alle werknemers op die terrein voorsien word voordat met die oprigting van 'n lotmeter begin word.

(3) Die gebruiker van 'n lotmeter moet toesien dat die plasing en oprigting van die masjinerie voldoen aan die vereistes uiteengesit deur die vervaardiger, en dat sodanige masjinerie soos ontwerp opgerig word.

(4) Die gebruiker van 'n lotmeter moet ten opsigte van werk wat op of naby lotmengers wat in beweging is verrig word, alle redelike voorsorgmaatreëls tref om te verseker dat persone veilig werk: Met dien verstande dat 'n inspekteur

te eniger tyd die werknemer of gebruiker kan versoek om sodanige verdere voorsorgmaatreëls te tref as wat in belang van veiligheid nodig geag word.

(5) Die gebruiker moet toesien dat alle toestelle om sodanige masjinerie aan te skakel of te stop, voorsien word en dat daardie toestelle-

(a) in 'n maklik bereikbare posisie geplaas moet word; en

(b) op so 'n wyse vervaardig word dat toevallige aanskakeling verhoed word.

(6) Die gebruiker moet toesien dat alle draaiende onbedekte asse, katrolle en tromme wat 'n gevaar vir enige persoon kan inhou, ingesluit of beskut moet word of dat soortgelyke maatreëls getref word.

(7) Die gebruiker moet toesien dat die masjinerie wat gekies word, geskik is vir die taak en dat alle gevaarlike bewegende dele van 'n menger buite bereik van persone geplaas word deur middel van deure, bedekkings of ander middele.

(8) Geen persoon mag toegelaat word om enige skut of veiligheidstoerusting wat met sodanige masjinerie verband hou, verwyder of wysig nie, tensy die gebruiker dit gemagtig het.

(9) Die gebruiker van lotmengers moet toesien dat alle persone wat gemagtig is om die masjinerie te bedien, ten volle bewus is van al die gevare wat by die bediening betrokke is, en ten volle vertrouwd is met voorsorgmaatreëls wat in belang van gesondheid en veiligheid getref moet word.

(10) Geen persone wat oor sodanige masjinerie toesig hou of dit bedien, mag enige ander persoon magtig om die masjinerie te bedien nie, tensy sodanige persoon bevoeg is om sodanige masjinerie te bedien.

(11) Die gebruiker moet toesien dat alle voorsorgmaatreëls soos voorgeskryf vir beperkte ruimtes (Algemene Veiligheidsregulasie 5) nagekom word wanneer 'n silo binnegegaan word.

(12) Die werkgewer moet toesien dat daar van enige herstelwerk aan of instandhouding van die lotmengers rekord gehou word en dat dit op versoek aan 'n inspekteur op die terrein beskikbaar gestel word.

(13) Die werkgewer moet toesien dat alle hystoestelle en hystakel wat vir die bediening van 'n lotmeter gebruik word, voldoen aan die vereistes van die Aangedrewe masjinerie Regulasies (18)(1).

Tonnelwerk

20. 'n Werkgewer wat tonnelaktiwiteite uitvoer, moet voldoen aan die Tonnelwerkregulasies, soos gepubliseer ingevolge die Wet op Gesondheid en Veiligheid in Myne, 1996 (Wet 29 van 1996).

Hyskrane

21.(1) Die werkgewer moet toesien dat alle hyskrane voldoen aan die bepalings van die Aangedrewe masjinerie Regulasies (18)(1).

(2) Behoudens die bepalings van subregulasies (1), moet die werkgewer toesien dat waar toringkrane gebruik word-

- (a) die uitwerking van windsterktes op die struktuur in aanmerking geneem word;
- (b) die dra vermoë van die grond waarop die toringkraan moet staan, in aanmerking geneem word;
- (c) die basisse vir die toringkrane en spore vir spoorgemonteerde toringkrane stewig en gelyk is;
- (d) die toringkrane op 'n veilige afstand van uitgrawings af opgerig word; en
- (e) daar 'n oop ruimte vir oprigting, bediening en aftakeling beskikbaar moet wees.

Elektriese installasie

22. Die werkgewer moet toesien dat alle elektriese installasie en elektriese masjinerie voldoen aan die Elektriese Installasie Regulasies gepubliseer ingevolge Goewermentskennisgewing R. 2910 van 23 Oktober 1992, en die Elektriese Masjinerie Regulasies gepubliseer ingevolge Goewermentskennisgewing R. 1953 van 12 Augustus 1988 onderskeidelik.

Vlambare vloeistowwe

23. Die werkgewer moet toesien dat die gebruik en opberging van vlambare vloeistowwe op 'n konstruksieterrein voldoen aan die Algemene Veiligheidsregulasies (4)(1).

Geraasblootstelling

24. Die werkgewer moet toesien dat indien die ekwivalente geraasvlak afkomstig van aktiwiteite by sodanige werkplek, waaraan 'n persoon in sodanige

werkplek blootgestel word 85 dB (A) of hoër is, die werkgewer aan die Omgewingsregulasies vir Werkplekke (7) moet voldoen.

Verligting

25. 'n Werkgewer wat met konstruksiewerk besig is, moet toesien dat alle kamers, trappe, gange, deurgange, kelders en ander plekke op die konstruksieterrein waar daar as gevolg van die afwesigheid van natuurlike lig gevaar kan bestaan, sodanig verlig word dat dit veilig sal wees.

Hittestres, koue en nat toestande

26.(1) Ondanks die bepalings vir termiese vereistes in die Omgewingsregulasies vir Werkplekke, moet 'n werkgewer toesien dat wanneer hittestres, koue of nat toestande sodanig is dat dit tot aantasting van die gesondheid of uiterste ongemak kan lei, daar voorsorgmaatreëls getref word.

(2) Indien daar in hittetoestande gewerk word en indien harde fisiese werk verrig word, moet die werkgewer van sodanige werknemer-

- (a) toesien dat elke werknemer by sodanige werksomgewing geakklimatiseer word voordat van hom vereis word of hy toegelaat word om in sodanige omgewing te werk;
- (b) elke sodanige werknemer inlig oor die noodsaaklikheid om elke uur minstens 600 milliliter water te drink;
- (c) elke sodanige werknemer oplei in die voorsorgmaatreëls om hittesteek te voorkom;
- (d) voldoende voorrade drinkwater vir sy werknemers by hul werkplek beskikbaar stel;
- (e) krane en pype wat water bevat wat nie vir menslike gebruik geskik is nie, duidelik en opsigtelik as sodanig merk; en
- (f) die middele voorsien waardeur sodanige werknemer met hittesteek vinnige noodhulpbehandeling kan ontvang:

Met dien verstande dat, indien die vraag ontstaan of enige besondere tipe werk inderdaad harde fisiese werk uitmaak, die besluit van 'n inspekteur deurslaggewend is.

Masjinerie

27.(1) Die werkgewer moet toesien dat die volgende tipes masjinerie voldoen aan die bepalings van die onderskeie artikels van die Aanaangedrewe masjinerie Regulasies gepubliseer ingevolge Goewermentskennisgewing R. 533 van 16 Maart 1990:

- (a) Draaiende masjinerie;
- (b) sirkelsae;
- (c) slypmasjiene;
- (d) betonmengers; en
- (e) lugkompressors.

Wateromgewings

28.(1) Die werkgewer moet toesien dat alle duikoperasies op konstruksieterreine voldoen aan die bepalings van die Duikregulasies gepubliseer ingevolge Goewermentskennisgewing R. 1031 van Mei 1986.

(2) Elke werkgewer moet maatreëls tref om dadelik in kennis gestel te word van enige dreigende oorstroming vanaf konstruksies vir die bewaring van water, of wat kan veroorsaak dat water op die werkgewer se terrein opdam, en die werkgewer moet voor die oprigting van sodanige konstruksie aan alle persone wat in die gevaarsone onderkant sodanige konstruksie is, skriftelik kennis gee van die moontlikheid van oorstroming vanweë sodanige konstruksie.

(3) Die werkgewer moet toesien dat waar werk bo-oor of baie na aan water gedoen word, daar voorsiening gemaak moet word-

- (a) om te voorkom dat werkers in die water val; en
- (b) vir die redding van werkers wat in gevaar van verdrinking verkeer.

(4) 'n Werkgewer moet toesien dat indien 'n werker blootgestel is aan die gevaar van verdrinking deurdat hy of sy in water kan val, 'n reddingsbaadjie aan die werker voorsien en deur hom gedra moet word.

Huishouding

29.(1) Behoudens die bepalings van die Omgewingsregulasies vir Werkplekke (6), moet die werkgewer toesien dat-

- (a) daar op elke konstruksieterrein deurlopend geskikte huishouding geïmplementeer word, wat bepalings moet insluit vir-

- (i) die behoorlike berging van materiale en toerusting; en
- (ii) die verwydering van skroot, afval en puin by geskikte tussenpose; en
- (b) los materiale wat nie vir gebruik benodig word nie, nie op die terrein geplaas word of toegelaat word om daar op te hoop sodat dit die toegang tot en uitgang vanaf werkplekke en gange versper nie;
- (2) Afval en puin mag nie vanaf 'n hoë plek weggedoen word deur 'n glygeut nie, tensy die glygeut-
 - (a) toereikend vervaardig en styf vasgemaak is;
 - (b) indien dit teen 'n hoek van meer as 45 grade met die horisontale vlak oorhel, aan al vier kante toegemaak is;
 - (c) indien dit van die oop tipe is, teen 'n hoek van minder as 45 grade met die horisontale vlak oorhel;
 - (d) waar nodig, van 'n hek aan die onderkant voorsien word om die vloei van materiaal te beheer; en
 - (e) ontlaai in 'n houer of 'n ingeslote gebied wat van versperrings voorsien is.

Opstapeling en opberging

30.(1) Die werkgewer moet toesien dat-

- (a) alle opstapeling van artikels op 'n konstruksieterrein voldoen aan die Algemene Veiligheidsregulasies (8) gepubliseer ingevolge Goewermenskennisgewing R.1031 van 30 Mei 1986;
- (b) 'n bevoegde werknemer aangestel word om toesig te hou oor alle opstapeling en opberging op 'n konstruksieterrein;
- (c) voldoende opbergingsareas voorsien word;
- (d) daar afgebakende opbergingsareas is; en
- (e) opbergingsareas netjies en onder beheer gehou word.

Voorsorgmaatreëls teen brand

31.(1) Behoudens die bepalings van die Omgewingsregulasies vir Werkplekke (9) gepubliseer ingevolge Goewermentskennisgewing R. 2281 van 16 Oktober 1987, moet elke werkgever toesien dat-

- (a) alle toepaslike maatreëls getref word om die gevaar van brand te voorkom;
- (b) voldoende en geskikte bergplek vir vlambare vloeistowwe, vaste stowwe en gasse voorsien word;
- (c) rook verbied word en kennisgewing opsigtelik vertoon word in alle plekke wat maklik brandbare en ontvlambare materiale bevat;
- (d) daar in beperkte ruimtes en ander plekke waarin vlambare gasse, dampe of stof gevaar kan veroorsaak-
 - (i) slegs geskikte beskermde elektriese installasies en toerusting, met inbegrip van draagbare ligte, gebruik word;
 - (ii) geen vlamme of soortgelyke ontbrandingsmiddele is nie;
 - (iii) kennisgewings is wat rook verbied;
 - (iv) olierige lappe, afval en ander stowwe wat maklik aan die brand kan raak, sonder versuim na 'n veilige plek geneem word; en
 - (v) voldoende ventilasie voorsien word;
- (e) brandbare materiale nie toegelaat word om op die konstruksieterrein op te hoop nie;
- (f) sweiswerk, vlamsnywerk en ander warmwerk slegs gedoen word nadat die geskikte voorsorgmaatreëls soos vereis, getref is om brandgevaar te verminder;
- (g) geskikte en toereikende brandblustoerusting aangebring is op strategiese plekke of soos aanbeveel deur die Brandweerhoof of betrokke plaaslike regering, en dat sodanige toerusting in 'n goeie werkende toestand in stand gehou word;
- (h) 'n voldoende aantal werkers in die gebruik van brandblustoerusting opgelei word;
- (i) geskikte visuele tekens aangebring word wat in die geval van 'n brand duidelik die ontsnappingsrigting aandui;

- (j) ontsnappingsroetes te alle tye oop gehou word; en
- (k) daar 'n doeltreffende ontruimingsplan is wat voorsiening daarvoor maak dat persone vinnig en sonder paniek ontruim en van rekenskap gegee kan word en dat alle masjinerie afgeskakel en prosesse afgesluit word.

Noodhulpprosedures

32. Die werkgewer moet toesien dat alle noodhulptoerusting en –prosedures voldoen aan die Algemene Veiligheidsregulasies (3) gepubliseer ingevolge Goewermentskennisgewing R. 1031 van 30 Mei 1986.

Persoonlike veiligheidstoerusting

33. Die werkgewer moet toesien dat alle persoonlike veiligheidstoerusting voldoen aan die Algemene Veiligheidsregulasies (2) gepubliseer ingevolge Goewermentskennisgewing R. 1031 van 30 Mei 1986.

Sweis-, vlamsnywerk en soortgelyke werk

34. Die werkgewer moet toesien dat alle sweis-, vlamsnywerk en soortgelyke werk voldoen aan die Algemene Veiligheidsregulasies (9) gepubliseer ingevolge Goewermentskennisgewing R. 1031 van 30 Mei 1986.

Gevaarlike chemiese stowwe

35. Die werkgewer moet toesien dat alle werk wat die gebruik van gevaarlike chemiese stowwe op 'n konstruksierrein behels, voldoen aan die Regulasies vir Gevaarlike Chemiese Substansies gepubliseer ingevolge Goewermentskennisgewing R. 1179 van 25 Augustus 1995.

Houers onder druk

36. Die werkgewer moet toesien dat alle werk wat die gebruik van houers onder druk op 'n konstruksierrein behels, voldoen aan die Regulasies vir Houers onder Druk gepubliseer ingevolge Goewermentskennisgewing R. 1591 van 4 Oktober 1996.

Konstruksievoertuie en grondverskuiwingstoerusting

37.(1) Die werkgewer moet toesien dat alle konstruksievoertuie en grondverskuiwingstoerusting-

- (a) van 'n aanvaarde ontwerp en konstruksie is;

- (b) in 'n goeie werkende toestand gehou word;
- (c) gebruik word met behoorlike inagneming van veiligheid en gesondheid;
- (d) bedien word deur werkers wat toepaslike opleiding ontvang het en bevoeg is om sodanige masjinerie te bedien;
- (e) bedien word deur werkers wat medies geskik is;
- (f) veilige en geskikte toegangsweë het;
- (g) in enige verkeer behoorlik georganiseer en beheer word ten einde hul veilige bediening te verseker;
- (h) deur voldoende seinwerk of ander maatreëls beheer word ten einde te waak teen enige gevare voortspruitend uit die beweging van voertuie en grondverskuiwingstoerusting;
- (i) deur voldoende voorkomende maatreëls verhoed word om in uitgrawings of water te val;
- (j) waar toepaslik, toegerus word met strukture wat ontwerp is om die operateur teen vallende material te beskerm en te verhoed dat die operateur vasgepen word indien die masjien omslaan;
- (k) toegerus is met 'n elektriese akoestiese seintoestel en 'n tru-alarm
- (l) daagliks voor gebruik ondersoek word.

Lere

37. Die werkgewer moet toesien dat alle lere voldoen aan die Algemene Veiligheidsregulasies (13A) gepubliseer ingevolge Goewermentskennisgewing R. 1031 van 30 Mei 1986.

Hellingsteiers

38. Die werkgewer moet toesien dat alle hellingsteiers voldoen aan die Algemene Veiligheidsregulasies (13B) gepubliseer ingevolge Goewermentskennisgewing R. 1031 van 30 Mei 1986.

Misdrywe en strawwe

39. Iemand wat 'n bepaling oortree van of versuim om te voldoen aan regulasies 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38 en 39 begaan 'n misdryf en is by skuldigbevinding strafbaar met 'n boete of met gevangenisstraf vir 'n tydperk van 12 maande en, in die geval van 'n aanhoudende misdryf, aan 'n bykomende boete van R200 vir elke dag waarop die misdryf voortduur, of bykomende gevangenisstraf van een dag vir elke dag waarop die misdryf voortduur. Met dien verstande dat die tydperk van sodanige bykomende gevangenisstraf nie 90 dae mag oorskry nie.

Herroeping van regulasies

41.(1) Die volgende regulasies word hierby herroep:

- (a) Algemene Veiligheidsregulasies 11, 12, 13, 13D, 13E, 13F en 13G gepubliseer ingevolge Goewermentskennisgewing R. 1031 van 30 Mei 1986;
- (b) Gedrewe Masjinerie Regulasies 19 en 20, gepubliseer ingevolge Goewermentskennisgewing R. 295 van 26 Februarie 1988; en
- (c) Algemene Administratiewe Regulasies 14, gepubliseer ingevolge Goewermentskennisgewing R. 1449 van 6 September 1996.

Kort titel

42. Hierdie regulasies heet die Konstruksieregulasies, 2002.

AANHANGSEL 1

WET OP BEROEPSGESONDHEID EN VEILIGHEID, 1993

Regulasie 3(1) van die Konstruksieregulasies

KENNISGEWING VAN KONSTRUKSIEWERK

-
- 1(a) Naam en posadres van hoofkontraakteur:
-
- (b) Naam en telefoonnommer van hoofkontraakteur se kontakpersoon:
-
2. Vergoedingsregistrasienommer van hoofkontraakteur:
-
- OF
- Registrasienommer van hoofkontraakteur se vergoedingsversekeraar:
-
- 3(a) Naam en posadres van kliënt:
-
- (b) Naam en telefoonnommer van kliënt se kontakpersoon:
-
- 4(a) Naam en posadres van argitek of raadgewende ingenieur(s) vir die projek:
-
- (b) Naam en telefoonnommer van argitek/raadgewende ingenieur se kontakpersoon:
-
5. Naam en telefoonnommer van die terreinkontakpersoon:
-
6. Presiese fisiese adres van die konstruksierrein of terreinkantoor:
-
-
7. Aard van die konstruksiewerk:
-
8. Verwagte aanvangsdatum van die konstruksiewerk:
-
9. Verwagte voltooiingsdatum van die konstruksiewerk:
-

10. Geraamde maksimum aantal persone op die konstruksieterrein:

11. Beplande aantal subkontraakteurs op die konstruksieterrein:

.....

.....

.....

Hoofkontraakteur

.....

Datum

.....

.....

Kliënt

.....

Datum

*

**HIERDIE DOKUMENT MOET AAN DIE KANTOOR VAN DIE
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