



THE CONSTRUCTION REGULATIONS 2014 – THE IMPACT ON CONSTRUCTION CLIENTS AND DESIGNERS

The following guidance note aims to set out the duties of the construction Client and the construction Designer as defined in the Construction Regulations 2014 to the Occupational Health and Safety Act. Certain relevant definitions have been included to assist interpretation.

It must be stressed that the interpretations are those of the writer. The writer has a Master's Degree in construction management health & safety and is a director and founding member of the Association of Construction Health & Safety Management (ACHASM). He worked as a health & safety co-ordinator for a large construction firm for 8 years where he implemented health & safety management systems on projects. He then went into private practice in 2003 as a construction health & safety agent, successfully offering services to construction Clients. He has the requisite understanding of the construction environment and is well positioned to comment on the subject of construction health & safety.

Contents:

1. Definitions
2. Scope of Application of the Regulations
3. Application for a construction work permit
4. Notification of construction work
5. Duties of the Client
6. Duties of the Designer
7. Structures
8. Temporary works

Abbreviations / acronyms:

CR = Construction Regulations

CHSA = Construction Health & Safety Agent

DoL = Department of Labour

H&S = Health & Safety

Spec = Health & Safety Specifications

SACPCMP = South African Council for the Project and Construction Management Professions

The Act = Occupational Health & Safety Act no.85 of 1993

CR 1. Definitions

“**Agent**” means a competent person who acts as a representative for a client.

Take note of the emphasis on person, not company.

“**Client**” means any person for whom construction work is being performed.

“**Competent person**” means a person who –

- a. Has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific to that work or tasks: Provided that where the appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, 2000 (Act no.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and
- b. is familiar with the Act and with the applicable regulations made under the Act.

Take note of the four legs of “competence”: all four need to be assessed and proven when deciding on regulatory competence.

“**Construction work**” means any work in connection with –

- a. the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- b. the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or any similar type of work;

Take note that “in connection with” requires further clarity. A guidance note is awaited from the DoL.

“**Contractor**” means an employer who performs construction work.

“**Design**” in relation to any structure, includes drawings, calculations, design details and specifications.

“Designer” means –

- a. a competent person who –
 - i. prepares a design;
 - ii. checks and approves a design;
 - iii. arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or
 - iv. designs temporary work, including its components;
- b. an architect or engineer contributing to, or having overall responsibility for a design;
- c. a building services engineer designing details for fixed plant;
- d. a surveyor specifying articles or drawing up specifications;
- e. a contractor carrying out design work as part of a design and building project; or
- f. an interior designer, shop-fitter or landscape architect.

“Health & safety specification” means a site, activity or project specific document prepared by the client pertaining to all health & safety requirements related to construction work

“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, bulk mixing plant, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure;
- b. any false work, scaffold or other structure designed or used to provide support or means of access during construction work; or
- c. any fixed plant in respect of construction work which includes installation, commissioning, decommissioning or dismantling and where any such work involves a risk of a person falling;

“Temporary works” means any falsework, formwork, support work, scaffold, shoring, or other temporary structure designed to provide support or means of access during construction work.

CR 2. Scope of application of the Regulations - Exemption

Where construction work involves a single storey dwelling for a client who intends to reside in the dwelling, no construction work permit is required and the ‘Duties of the Client’ (CR 5) do not need to be implemented. All the other construction regulations however still need to be implemented and complied with e.g. duties of designers, duties of contractors, management and supervision of the work, etc.

CR 3. Application for a construction work permit

The construction work permit is applicable and must be applied for when the construction work is expected to:

- a. Exceed 180 days (6 months typically);
- b. Will involve more than 1800 person days e.g. 20 workers on site for 4 months (23 day months) or 30 workers on site for 3 months, etc.;
- c. The contract is of a value equal to or exceeding R13-million;
- d. The contract is rated as a CIDB grading level 6.

The application must be lodged with the Provincial Director of the Department of Labour at least 30 days before starting any construction work on site (construction work includes such activities as site camp set-up, fencing installation, etc.).

This regulation comes into effect from the 7th August 2015. It is not clear yet whether construction projects already on the go will need to apply for a construction work permit. This question has been lodged but no clarity has yet been received.

It is important to understand that the permit application needs to include certain documentation which will take time to gather, compile, package for submission to the Provincial Director and which may only be submitted by a licensed construction health & safety agent (CHSA). It is expected that the 30 day lead time will become more like 45 days. Lead time is especially important to ensure sufficient time to receive, assess, amend, and approve the Contractor's health & safety plan and start-up risk assessments and other primary compliance documentation before submitting to the Provincial Director.

It will now be mandatory that the CHSA be appointed early in the construction process so that *all* the Client duties can be complied with and that the submission to the Provincial Director can be made timeously.

CR 4. Notification of construction work

The Provincial Director of the Department of Labour needs to be notified of construction work (other than the work requiring a construction work permit) if such work includes: excavation work; work where there is a risk of falling; demolition work; use of explosives. Notification is also required for single storey dwellings where the client intends to reside therein. Such notification must be given at least 7 days before any construction work begins.

CR 5. Duties of the Client

1. A Client must –
 - a. Prepare a baseline risk assessment for the project *[such risk assessment would need to include existing hazards specific to the construction work area; inherent risks specific to the type of construction in question; foreseeable hazards based on activities foreseen on the project; an assessment of hazards where designers could play a part to reduce or eliminate the risk.]*
 - b. Prepare a site specific health & safety specification (Spec) based on the baseline risk assessment;
 - c. Provide Designers with the Spec *[the Principal Agent would need to coordinate this duty];*
 - d. Ensure that the Designers take the Spec into consideration during the design stage *[how will this be ensured – not sure?];*
 - e. Ensure that the Designers carry out their duties as contemplated in CR6 *[The Principal Agent will need to undertake this duty.];*
 - f. Include the Spec in the tender documentation *[Quantity Surveyors will need to ensure that this happens.];*
 - g. Ensure that tenderers have made adequate provision for the cost of health & safety *[This duty requires input from various parties – consultants need to at least include a list of items to be priced in the Bill of Quantities.];*
 - h. Ensure that the Contractor to be appointed has the necessary competencies and resources to undertake the work *[Who will undertake this duty? The criteria needs to be agreed upon before going out to tender and the tenderers need to reply to certain questions and show proof of competence and resources.];*
 - i. Take reasonable steps to ensure co-operation between contractors appointed by the client *[Where the Client appoints Direct Contractors and perhaps multiple Contractors on a project, communication, meeting, co-ordination of the health & safety, supervision, etc. must be formalised and managed/co-ordinated by the Principal Agent.];*
 - j. Ensure that every Contractor is registered for workman's compensation and in good standing *[This must be a contract requirement – the consultants can't propose the appointment of a contractor who can't prove workman's compensation good standing. This is also a minimum requirement for the application of the construction work permit.];*
 - k. Appoint every Contractor;
 - l. Discuss and negotiate with the Contractor the contents of its health & safety plan and finally approve the plan for implementation *[This duty takes time to achieve and the time is based on the competence of the Contractor being assessed – most contractors have sub-standard H&S management systems and H&S personnel. A H&S Plan must contain a list of project*

hazards foreseen, must set out the H&S control measures to be implemented; must include a detailed baseline risk assessment of the activities / hazards foreseen; and must be based on the Client's baseline risk assessment document and project H&S Spec. The CHSA needs follow a formal systematic approach when undertaking this critical task / duty. A detailed H&S Plan and supporting primary compliance documentation is the basis for a successful project from a health & safety perspective. The enforcement and monitoring of a comprehensive health & safety management system (another term for a H&S Plan) on site will go a long way to preventing injuries and property damage, and will serve as an important legal defence tool for the Client.];

- m. Ensure that a copy of the H&S Plan is available on request;
 - n. Take reasonable steps to ensure that the H&S Plan is implemented and *maintained [The CHSA needs to ensure that the Contractor's H&S management system approved at the outset is actually being implemented on site. This is done by carrying out documentation audits and site hazard surveys. Shortcomings need to be identified and corrective measures proposed/instructed. Ensuring that the H&S management system is being implemented and maintained cannot be ensured by means of monthly audits alone. Time spent on site (and dedicated to the project) by the CHSA is a function of the project H&S complexity and needs to be discussed and agreed with the Client and P/Agent on a project specific basis.];*
 - o. Ensure that health & safety audits and document verification (not merely site inspections) are conducted at least once every 30 days *[A project H&S complexity profile should be used to determine the number of site visits, site hazard surveys, and audits required per month.];*
 - p. Audit reports must be issued within 7 days;
 - q. Stop any contractor from executing a construction activity which poses a threat to the health and safety of persons and/or which is not in accordance with the Client's Spec or Contractor's H&S Plan;
 - r. Where changes to the design or construction work are brought about, make all necessary health & safety information and appropriate resources available to the Contractor *[Duty of the designers];*
 - s. Ensure that the P/Contractor's H&S File is kept and maintained on site *[Assessed by the CHSA at audits and site hazard surveys];*
2. Where a fatality or permanent disabling injury occurs (this should include temporary disabling injuries), the Client must ensure that the contractor provides the Provincial Director with the necessary documentation. The Client must ensure that the report includes the measures to be taken to prevent a similar incident and that these are actually implemented on site.

3. Where a construction work permit is required, the Client must appoint a licensed agent in writing *[see notes on construction work permits under the respective heading herein above]*.
4. The Agent must manage the health & safety on the construction project for the Client and must be registered with the SACPCMP (a requirement as from the 7th August 2015). *[This is a very broad duty and with far reaching consequences if not adequately undertaken and proven: awaiting guidelines from the Department of Labour.]*

The above duties need to be clearly assigned by the Principal Agent at the outset of the project (as early as stage 2 or 3). There is no reason why certain duties cannot be assigned to other members of the professional team such as the Quantity Surveyor, Architect, Project Manager, etc. as indicated in the supporting notes above.

Note that over the past 10 years and still currently, the CHSA usually only gets contacted a week before tenders go out. This situation will need to change should a successful construction work permit application be possible. Currently, because of limited understanding of the legislation and late appointment of the CHSA by Principal Agent, duties and associated responsibilities are limited to:

- a. Compiling a baseline risk assessment;
- b. Compiling the Spec;
- c. assessing, discussing, amending, and finally approving the Contractor's H&S Plan;
- d. Carrying out site monitoring including documentation audits and site hazard surveys;
- e. Attending site progress meetings to report back on H&S findings.

It will now be important for the Principal Agent to advise a Client to appoint the CHSA early in the design process and clearly define the role, duties and deliverables and associated fees. As mentioned above, there is no reason why some of the Client duties can't be undertaken by other members of the professional team however these must be clearly identified and set out by the Principal Agent. The effective co-ordination of the Client's duties will now become even more important should the successful application for a construction work permit be at all possible.

CR 6. Duties of Designers

Take note of the definition of a Designer. See definitions herein above.

A designer must –

- a. Ensure that all applicable safety standards are complied with *[This goes without saying. The Client must appoint competent Designers – see definition of competent under the heading definitions herein above];*
- b. Take into consideration the H&S Spec *[It would appear that the Spec needs to be compiled fairly early on if it is to be considered by the designers during the design stage];*
- c. Compile a report addressed to the Client detailing *[A report is a written document and should be called for from all Designers by the Principal Agent]:*
 - i. All relevant health & safety information about the design that may affect the pricing of the work;
 - ii. The geotechnical-science aspects where applicable;
 - iii. The loading that the structure(s) is designed to withstands.

[The report must aim to address the design related issues (see below) as best possible in an effort to make as much information available to the contractors so that they can improve their H&S management on the actual site. It is not disputed that due process is and will be followed by the Designers however the recording of this is now becoming more and more important in case of scrutiny by the Department of Labour or after an incident.

The following points should be addressed as a minimum:

1. *Anticipated or known dangers or hazards relating to the construction work foreseen by the Designer, including the relevant information required for the safe execution of the work. This must also include health & safety information about the design which could have an influence on the pricing of the construction work.*
2. *Dangerous substances/materials which cannot not be avoided.*
3. *Dangerous procedures which cannot be avoided.*
4. *Hazards and risks relating to the subsequent maintenance of the structure/building foreseen and the resulting safe work procedures advised.*
5. *Site inspections to verify whether construction of the relevant structures are being carried in accordance with the designs. How will this be handled by you and your team on the project?*
6. *The stoppage of contractors where required (by the Designer) - the envisaged protocol to be followed to stop an activity or process on site. How will this be handled by you and your team on the project?*
7. *The application of ergonomic principles during design - how has and will this be implemented by the respective Designer.*

8. *Design of temporary works if applicable e.g. formwork and support work, back propping, shoring and bracing of excavations, etc. You may need to refer to the temporary works designer being a separate entity.*
 9. *The loading that a structure can withstand and/or is designed to withstand – details on this must be included in the report.*
 10. *Geotechnical science aspects where appropriate. [You may merely have to refer to the geo-tech report.]*
- d. Inform the Client of any known and anticipated dangers and hazards relating to the work, and make available all relevant information required for the safe execution of the work [*How about including design related health & safety notes on the drawings where required?*];
 - e. Refrain from including anything in the design that necessitates the use of dangerous procedures or materials hazardous to health & safety of persons;
 - f. Take into account the hazards relating to the subsequent maintenance of the relevant structure [*Cleaning of facades and similar elevated structures, servicing plant, maintenance of roofs and gutters, access to plant where fall risks are prevalent; maintenance of solar and other equipment on roofs and roof slabs, access to roof spaces, access within roof spaces, maintenance of bridge bearings, inspections of structures, etc.*];
 - g. Carry out inspections at appropriate stages to verify that construction is in accordance with design [*Discussed and agreed between the Principal Agent and Designers as a function of agreeing the Designers' fees*];
 - h. Stop any contractor from executing a construction activity which poses a threat to the health and safety of persons and/or which is not in accordance with the design's health & safety aspects [*This could be by means of a site instruction or similar formal, written approach*];
 - i. Carry out a final inspection in accordance with the National Building Regulations and declare the structure safe for occupation/use, and issue a completion certificate to the Client;
 - j. Take into account ergonomic principles during design which could have an effect on persons during all phases of the life cycle of the structure / building.

Designers need to realise that although they might be carrying out certain or all of the above duties, they are not keeping adequate records of their actions. The co-ordination of this function of record keeping should be the responsibility of the Principal Agent or project manager, or the CHSA and must be clearly detailed in the relevant professional team appointments (as early as stage 1 or 2).

It is important to note that one of the Client's duties [as listed above – Client duty 5(e)] is to ensure that the Designers carry out their responsibilities contemplated in Regulation 6. If the CHSA is appointed to take on this duty, it will require the necessary co-ordination skills, time, resources, and

fees. Someone needs to co-ordinate this function – it is after all a legal requirement. The Client and Principal Agent needs to make this decision and make it during stage 1 or 2 of the project.

A temporary works designer must ensure that:

- a. All temporary works are adequately designed so that it will be capable of supporting all anticipated vertical and lateral loads that may be imposed;
- b. The designs of temporary works are done with close reference to the structural design drawings issued by the contractor;
- c. All drawings and calculations are kept at the office of the temporary works designer;
- d. The loads caused by the temporary works and any imposed loads are clearly indicated in the design.

The ‘temporary works designer’ appears for the first time in the Construction Regulations specifically because the appointed consulting engineers “don’t take responsibility for temporary works”. The intention is that all formwork and support work including back-propping and other temporary supports are designed properly, erected according to design, inspected, and approved before loading. Note that temporary works includes scaffolding and excavation shoring/bracing. This is an important aspect of construction work as failures can lead to multiple fatality incidents as was experienced at the Inyaka bridge collapse in the 90’s and the Coega bridge collapse in the early 2000’s. More recently, the Tongaat Mall collapse was also more than likely due to inadequate temporary works (either inadequate design or sub-standard site management thereof).

CR 7. Structures

Take note of the definition of a Structure. See definitions herein above.

1. A contractor must ensure that –
 - a. All reasonable steps are taken to prevent the uncontrolled collapse of any new or existing structure or part thereof during construction work;
 - b. No overloading of any structure which will render it unsafe;
 - c. All design drawings of the relevant structures (whether existing or new) are kept on site.
2. The owner of a structure must ensure that –
 - a. Inspections of that structure are carried out at least once every six months for the first two years (after completion) and thereafter yearly by competent persons (note the emphasis on the plural) in order to render the structure safe for continued use. Such

inspections and resultant maintenance and repairs must be recorded and the records held by the owner of the structure.

Without the necessary guidance notes from the Department of Labour, it is not known what these 'structure inspections' should include. It is however suggested that as a minimum, the structural integrity of such components as the roof and roof supporting structure, the concrete frame, structural steel work, brick work, dry walling and bulkheads, hanging and cantilevered structures, access stairs and balustrades, balconies and balustrades, glazing, piling and lateral supports to subterranean spaces, concrete founding structures, and the like.

It is once again stressed that this guidance note merely serves to clarify and outline the practical roles of the Client and Designer as envisaged by the writer. It is important that the Construction Regulations are studied as the basis for any further interpretations. The Department of Labour is the custodian of the Regulations and should be consulted in case of uncertainty and/or guidance.

10.03.2015

MARIUS EPPENBERGER

Construction health & safety Agent | *MTech (Constr Manag) IoSM ACHASM*