PURPOSE: To draw members’ attention to their obligations and responsibilities as Designer, and as Agent of the Client, in terms of the OHS Act.

KEY WORDS: Occupational Health and Safety, OHS ACT, Consultant as Agent, Consultant as Designer, Construction Regulations, Health and Safety Plan.

INTRODUCTION

The Occupational Health and Safety Act and Associated Construction Regulations in essence are intended to focus on minimising the incidence of accidents and exposure to hazards in the workplace. Its focus therefore should be about preservation of life and not on the negative consequences of accidents in the workplace, the root cause of which is poor management.

Accidents in the workplace impact poorly on the image of our profession as a whole and every effort should be made to minimise such incidences and the consequences of occupational hazards in the workplace.

Health and safety is measured not only in economic terms, but also has social consequences which are often difficult to quantify. Good safety management enhances the bottom line through increased profitability and return on investment. It therefore makes good business sense and should be seen as part of total Quality Management. The concept of zero accidents along the entire value chain should underpin the Consulting Engineer’s involvement and input on a project.

All contracts now have to satisfy the provisions in the Act and Regulations, as is the case in most developed nations of the world.

IMPLICATIONS TO THE CONSULTING ENGINEER

The Construction Regulations promulgated on the 18th July 2003 ensure that not only the Principal Contractor but also the Client has a responsibility to provide a safe and healthy working environment for all employees.

The Regulations now also place a responsibility on the Designer, irrespective of his involvement in the construction phase of the project to ensure the safety of his design.
The Construction Regulations ensure that:

- Hazards or potential hazards to a healthy working environment are identified.
- These hazards are removed or reduced.
- Employees are trained to work safely in potential hazardous conditions

**Consultant as agent of the Client**

As agent of the Client, the Consulting Engineer must ensure that the Client’s responsibilities in terms clause 4 of the Regulations are complied with. The Consulting Engineer shall only act as the agent of the Client if specifically appointed as such in terms if sub-clause 4(5) of the Regulations. The terms of his remuneration for these extra duties should be included in the agreement between the Consultant and the Client.

As most Clients appoint the Consultant to take responsibility for the technical as well as managerial aspects of his project, it should be a natural extension of the Consultant’s duties to also manage the project in terms of the Construction Regulations. However for the sake of certainty and the avoidance of doubt, it is recommended that this duty be specifically dealt with in the scope of services to be provided by the Consultant.

It should be noted that the Engineering Council of South Africa Guideline Scope of Services and Tariff of Fees for Persons Registered in terms of the Engineering Profession Act, 2000, (Act No. 46 of 2000), in Board Notice 42 of 2004 (Govt. Gazette No. 26180, 2 April 2004), provides under “Additional Services” (clause 2.2.3) that “Should the client require the consulting engineer to undertake duties falling under the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Construction Regulations in terms thereof, on behalf of the client, the additional services may include the following:

1. The consulting engineer must arrange, formally and in writing, for the contractor to provide documentary evidence of compliance with all the requirements of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)
2. The consulting engineer must execute the duties of the client, as his appointed agent, as contemplated in the Construction Regulations to the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

The Client shall however only appoint the agent if he is reasonably satisfied that the agent has the necessary competencies and resources to perform the duties imposed on him by the regulations. The Consultant should on the other hand only accept the appointment if he can perform this competently.

The acceptance of these duties may also have an impact on Consultants’ professional indemnity insurance. The potential risk associated with accepting these duties is enormous. For this reason Consultants need to be adequately remunerated. Furthermore the provision of this type of service to clients needs to be disclosed to insurers, as at the moment such services cannot be said to form part of ordinary consulting services. If such is not properly disclosed to insurers, in event of a claim based on a Consultant’s failure/negligence to adhere to or implement the construction regulations, it is a distinct possibility that such a claim may be repudiated.

It is however important to note that the client bears the ultimate responsibility for the implementation and adherence to regulations. In terms of a contract, a client may look to recover damages from the Consultant, however the client cannot avoid any punitive awards or other sanctions imposed by legislation. Likewise the consultant cannot insure against some of the punitive awards or other sanctions which may be imposed by legislation.
Tender documentation

It is recommended that the Consulting Engineer indicate the following in the tender documentation:

- Whether the Principal Contractor has to give notice of the construction work in terms of clause 3 of the Construction Regulations.
- That it is the responsibility of, and is expected of the Principal Contractor and his Contractors to provide for the expenditure related to the management of the Construction Regulations in his tender. (sub-clause 4(1)(h))
  - Whether the costs should be included in the Principle Contractors rates, or:
  - Items that will be paid for separately in the bill of quantities. (E.g. Provision of a full time safety officer, etc.)

Evaluation of tenders

Evaluation of tenders should include recommendations to the client regarding the competency of the Principal Contractor to carry out the work safely. (Sub-clause 4(4))

Construction

Accepting an appointment from a client to act as the Client’s agent, the Consulting Engineer needs to address the following: (clause 4)

- Prepare a health and safety specification for the construction work
- Provide the Principal Contractor with the necessary information to compile his health and safety plan.
- Ensure that each Principal Contractor is appointed in writing.
- Approve of and see that the Principal Contractor’s health and safety plan is implemented and maintained.
- Stop any Contractor from executing work, which is not in accordance with the approved health and safety plan or poses a threat to the health and safety of persons.
- Manage changes to the health and safety plan of the Contractors.
- Ensure that every Principal Contractor is registered and in good standing with the compensation fund.

Most of the above can be included in the health and safety specification to be compiled.

Contractors health and safety plan

The Principal Contractors health and safety plan should be based on the following principles:

- A proper risk assessment of the construction work.
- Pro-active identification of potential hazards and unsafe working conditions.
- Informing and/or training of employees in hazards and risk areas.
- Provision of a safe working environment and safety equipment.
- Ensure the safety of his Contractors through their safety plans.
• Monitoring the health and safety on the construction works on a regular basis.
• Use competent safety officers.

The Principal Contractors health and safety plan should cover the following detail, where applicable:

Clause 5: Principal Contractor and Contractors
• Methods to ensure the approval, implementation and maintenance of all health and safety aspects regarding his Contractors.

Clause 6: Supervision of construction work.
• Details of the construction supervisor as well as his appointed assistants.
• Details of the construction safety officer. (Full-time or part-time)
• Details of the suitability and competency of the above persons regarding the health and safety aspects of the construction works.

Clause 7: Risk assessment
• Details of a proper risk assessment on which his health and safety plan is based
• Ways, in which all construction employees are informed, instructed and trained regarding hazards and the related work procedures.

Clause 8 to 28: Risk items to be addressed
• The Principal Contractors health and safety plan should contain details of the design, management, responsibilities, worker training, work methods, procedures, maintenance or any other requirement necessary for him and his Contractors to work safely and in a healthy environment as stipulated in these clauses.

Additional requirements imposed on the designer of a structure

The Construction Regulations (clause 9(2)) specifically require the designer of a structure to:

• 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.
• 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.
• Subject to the provisions of the above two paragraphs, ensure that the following information is included in a report and made available to the Contractor:
  • A Geo-science technical report where appropriate;
  • The loading the structure is designed to withstand;
  • The methods and sequence of construction.
  • 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.
  • 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 minimise the risk.
• 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.
• Stop any Contractor from executing any construction work, which is not in accordance with the relevant design.
• Conduct a final inspection of the completed structure prior to its commissioning in order to render it safe for use and issue a completion certificate to the Contractor; and
• Ensure that when preparing the design, cognisance is taken of ergonomic design principles in order to minimise ergonomic related hazards in all phases of the life cycle of a structure.