



Government of **Western Australia**
Department of **Commerce**

National Standard for Construction Work

Guidance for:
**Main contractors and people
with control of construction work**

October 2007

1. Introduction

New regulations relating to the National Standard for Construction Work came into operation for the civil/commercial construction sector on 3 January 2008 and will commence for the residential construction sector on 1 October 2008.

The new regulations introduce requirements relating to the provision of information, consultation, planning, documentation and other measures to ensure occupational safety and health in the building and construction industry.

These regulations are contained in Division 12 of Part 3 of the Occupational Safety and Health Regulations 1996.

2. Who do the new regulations apply to?

The following people have responsibilities under the new regulations:

- Main contractors and people with control of construction work;
- Clients commissioning design and/or construction work as part of a trade or business; and
- Designers doing design work for construction projects.

3. What responsibilities do main contractors have under the new regulations?

The main contractor has an important role to play in ensuring occupational safety and health at the construction site. Details of the main contractor's responsibilities under the new regulations are set out in sub-paragraphs (a) to (c).

(a) Responsibility to ensure that occupational safety and health information is compiled and recorded

Main contractors must ensure, as far as practicable, that information in their control that relates to the hazard identification, risk assessment and risk control processes for a construction project is compiled, recorded and kept until the construction work is complete. The level of detail to be recorded must be appropriate for the degree of risk identified.

The information set out in sections (i) to (v) provides guidance on what should be taken into account as part of the risk management process.

(i) Identification of hazards

Any hazards that may harm the health or safety of those undertaking construction work at the site, or anyone else who may be affected by the construction work, must be identified and recorded. This includes identifying the potential consequences of the hazard.

In conducting the hazard identification process, particular attention should be paid to hazards arising from:

- The construction site itself, including its location, layout, condition and accessibility;
- Any design relating to the construction project;
- Working at height;
- Hazardous substances, including the handling, use, storage, and on-site transport or disposal of hazardous substances;
- The presence of asbestos;
- Systems of work;
- Plant, including the on-site transport, installation, erection, commissioning, use, repair, maintenance, dismantling, storage or disposal of plant;
- Manual handling, including the potential for occupational overuse injuries;
- The physical working environment - for example, the potential for electrocution; drowning; fire or explosion; slips, trips and falls; people being struck by moving plant; objects or structures falling on people; exposure to noise, heat, cold, vibration, radiation, static electricity or a contaminated atmosphere; and the presence of a confined space.

The hazard identification process should be undertaken before any construction work starts at the site and should be reviewed regularly as the construction project progresses. A review is particularly important in the following circumstances:

- Whenever there is information that any hazard identification that has already been completed is no longer adequate;
- Whenever advice is received from a person undertaking any construction work at the site that there is a hazard that has not been previously identified;
- Whenever injury or harm results from exposure to a hazard that has not been identified;
- Whenever injury or harm results from exposure to a hazard to which a risk assessment or risk control measure relates; and
- Whenever a significant change is proposed for the construction site, or a part of it, including the introduction of new plant or technology, or new procedures or systems of work.

Main contractors should also ensure that there are effective procedures in place to identify and record hazards in the following circumstances:

- Before and during the installation, erection, commissioning or alteration of plant;
- Before changes to systems of work are introduced or a significant change to the construction site, or a part of it, is implemented;
- Before hazardous substances are introduced; and
- When new or additional occupational safety and health information from an authoritative source becomes available - for example, national standards or codes of practice, guidance material produced by a regulatory authority, industry codes of practice or information from manufacturers, suppliers or designers.

The conclusion of the hazard identification process should result in a list of:

- hazards or hazard sources;
- the areas of the workplace or work process where the hazard occurs;
- the people exposed to those hazards; and
- the potential consequences (that is, any injury, harm, disease or illness that may occur).

Ideally, this list should be structured from most serious to least serious.

Further general information on hazard identification can be found in the Guidance Note: *General Duty of Care in Western Australian Workplaces* published by the Commission for Occupational Safety and Health.

(ii) Assessment of risks arising from hazards

When hazards and the potential consequences have been identified, a risk assessment must be undertaken to determine how likely it is that the hazards will cause any injury or harm to people at the construction site. This includes any visitors to the site, members of the public who may be in close proximity, or people occupying adjoining buildings or premises. This assessment process involves:

- evaluating the likelihood of an injury, illness or disease occurring, and the likely severity of any injury, illness or disease that may occur; and
- reviewing all available safety and health information relevant to the identified hazard or hazards.

The key things to consider as part of the risk assessment process are:

- Frequency of injury - how often is the hazard likely to result in an injury or disease?
- Where, which and how many workers are likely to be at risk of incurring injury or harm?
- Duration of exposure - how long is the worker exposed to the hazard?
- Outcome - what are the consequences or potential severity of the injury or harm?

In conducting a risk assessment, each work activity or process should be broken down into a series of parts or smaller tasks and assessed separately. Risk assessment is not an exact science - it is a 'best estimate' on the basis of the information available. It is therefore important that the person undertaking the risk assessment has the necessary information, knowledge and experience of the work environment and work process. Involving other people with specific information, knowledge and experience in the process is also important.

Risk assessments should be constantly reviewed as the construction project progresses. This is particularly important in the following circumstances:

- Whenever there is information that any risk assessment previously undertaken is no longer adequate;
- Whenever advice is received from a person undertaking any construction work at the site that there is a risk that has not been assessed;
- Whenever injury or harm results from exposure to a hazard to which a risk assessment relates; and
- Whenever a significant change is proposed for the construction site, or a part of it, including the introduction of new plant or technology, or new procedures or systems of work.

Further information on the risk assessment process can be found in the Guidance Note: *General Duty of Care in Western Australian Workplaces* published by the Commission for Occupational Safety and Health.

(iii) Risk control

When hazards have been identified and the risk assessment process completed, appropriate risk control measures need to be put in place to protect all those assessed as being at risk from the construction work. In determining the control measures to be implemented, the following hierarchy or preferred order of control should be used:

Elimination - removing the hazard or hazardous work practice from the workplace. This is the most effective control measure and should always be considered before anything else. If elimination is not practicable, the risk must be reduced through other measures to be considered in the following order:

Substitution - substituting or replacing a hazard or hazardous work practice with a less hazardous one

Isolation - isolating or separating the hazard or hazardous work practice from people involved in the work or other people at the site.

Engineering control - if the hazard cannot be eliminated, substituted or isolated, an engineering control is the next preferred measure. This may include modifications to tools or equipment.

Administrative control - this includes implementing work practices that reduce the risk, such as limiting the amount of time a person is exposed to a particular hazard.

Personal protective equipment - this should be considered only when other control measures are not practicable, or to increase protection.

Most effective control measures

Least effective control measures

The measures that need to be adopted in line with the hierarchy should be adapted to suit the specific circumstances of the construction project. In some instances, a combination of different control measures may be appropriate to eliminate or reduce risks.

Main contractors should ensure that all measures adopted to eliminate or otherwise control risks to safety and health, including plant and systems of work:

- are properly used and maintained; and
- take account of any safety and health information that may have been provided to the main contractor by the client.

If the main contractor is aware that:

- there is an uncontrolled risk, or a risk that could be better controlled, and
- elimination, control or better control of the risk could be achieved by changing the design,

then he or she should ensure that this information is given to the client so they can seek a change to the design.

As with the first two steps of the risk management process, risk control measures should be constantly monitored and reviewed. This is particularly important:

- When there is information that a risk control measure is no longer adequate;
- When advice is received from a person undertaking any construction work at the site that there is a risk that has not been eliminated or adequately controlled;
- Whenever injury or harm results from exposure to a hazard; and
- Whenever a significant change is proposed for the construction site, or a part of it, including the introduction of new plant or technology, or new procedures or systems of work.

In considering the risk management process as a whole, main contractors should also be aware that a number of control measures are specifically mandated in the occupational safety and health legislation and must always be followed. Examples of mandatory controls include:

- Protection of people and property in the vicinity of cranes (regulation 3.23).
- Edge protection (regulation 3.55).
- Restrictions on working in the vicinity of overhead power lines (regulation 3.64).
- Transport, craning, storage and erection of concrete panels at construction sites to be in accordance with Australian Standard AS3850 (regulation 3.88C).

(iv) Provision of information, instruction and training

Main contractors should check that any information, instruction and training regarding hazards, risks and control measures has been given to those undertaking the construction work. How and when this is done should be appropriate for the identified risk(s) and should consider the provisions of any specific regulations that relate to the provision of information, instruction and training - for example, the requirements for construction safety awareness training, the tilt-up and precast concrete construction training obligations and the requirements for demolition training.

A person should not be directed or allowed to carry out construction work at the construction site unless the main contractor is satisfied that he or she has undertaken the required occupational safety and health induction training. This includes construction safety awareness training and any site-specific induction training.

(v) Consultation on occupational safety and health at the construction site

Main contractors should ensure, as far as practicable, that there are consultation arrangements in place so that the views of people engaged to undertake the construction work, as well as any safety and health representatives, can be sought on work-related matters that may affect their safety and health.

Further information on consultation at the workplace can be found in the Guidance Note: "*Formal Consultative Processes at the Workplace*" published by the Commission for Occupational Safety and Health.

(b) Preparation of Occupational Safety and Health Management Plans

One of the main contractor's key responsibilities under the new regulations is to ensure that a site-specific Occupational Safety and Health Management Plan is prepared for each construction site where five or more people are working, or are likely to be working, at the same time. The Occupational Safety and Health Management Plan is the cornerstone for managing safety and health at the construction site.

The plan must be prepared before work starts at the construction site and must be monitored, maintained and updated as the project progresses. It should be written in a way that is easy to understand, and be signed and dated by the main contractor.

The main contractor must ensure, as far as practicable, that the plan includes:

- The name and position of each person at the construction site who has a specific occupational safety and health responsibility;
- A description of what those specific responsibilities are and how they are to be coordinated;

- Details of the occupational safety and health induction training that will take place in respect of the construction work to be done at the site. This includes the requirement for people to undertake construction safety awareness training, as well as any job-specific or site-specific induction training;
- The arrangements for managing any occupational safety and health incidents that may occur. This should include the names and contact details of each person who will be available to prevent, prepare for, respond to and manage recovery from any such incidents;
- Any site safety rules;
- Details of the arrangements for ensuring that everyone at the construction site, including visitors, is informed of the site safety rules;
- Details of the information held by the main contractor regarding the hazard identification, risk assessment and risk control processes for all work activities that have been assessed as having safety risks; and
- Safe work method statements (also known as Job Safety Analyses, or JSAs) for any 'high-risk construction work' to be done at the site (see sub-paragraph (c) below).

As far as practicable, the main contractor must ensure that each person doing construction work at the site has been made aware of the Occupational Safety and Health Management Plan and how it applies to their work. The best way to do this is to give each person a copy of all relevant parts of the plan. However, this is not always practical so making the plan widely available at the site and discussing its contents in, for instance, toolbox meetings, site inductions, and meetings with contractors, safety and health representatives and other people involved in the project may be a way of ensuring that everyone on site is familiar with the plan.

If changes are made to the plan at any stage, it is the main contractor's responsibility to ensure, as far as practicable, that each person doing construction work at the site is notified of the changes that relate to their particular work activity as soon as possible. The best way to do this is to give people a copy of the relevant parts of the amended plan.

In addition to making sure that those doing construction work are aware of the plan, main contractors must ensure, as far as practicable, that throughout the course of the construction project a copy of the plan is available for inspection by the following people:

- Any person about to commence construction work at the site;
- Any employee member of a safety and health committee for the site (if there is such a committee); and
- Any safety and health representative for the construction site.

Demolition contractors should note that the Occupational Safety and Health Management Plan required under these regulations is not the same as the Occupational Safety and Health Management Plan required as part of the demolition licensing arrangements.

(c) Preparation of safe work method statements for all "high-risk construction work"

Main contractors are required to ensure that any 'high-risk construction work' to be done at the site is covered by a safe work method statement (also known as a Job Safety Analysis, or JSA).

Safe work method statements or JSAs for 'high-risk construction work' must be in writing and, as far as practicable, contain the following information:

- Each high-risk construction work activity that is or includes a hazard to which a person is likely to be exposed;
- The risk of injury or harm to a person resulting from any such hazards;
- The safety measures to be implemented to reduce the risk(s), including the control measures to be applied to the work activity or hazard(s);
- A description of the equipment used in the high-risk construction work activity; and
- Any qualifications and/or training required to enable people to do the work safely.

The JSAs for 'high-risk construction work' are to be given to the main contractor by each person identified by the main contractor as having day-to-day on-site control of 'high-risk construction work'. However, if the main contractor is unable to identify any such person then the main contractor must prepare the necessary statement(s) or JSA(s) for 'high-risk construction work' .

The main contractor must also ensure that:

- all safe work method statements or JSAs for 'high-risk construction work' are updated as the project progresses and are listed as part of any Occupational Safety and Health Management Plan for the site (see sub-paragraph (b) above); and
- there are measures in place to ensure, as far as practicable, that:
 - everyone undertaking 'high-risk construction work' complies with the relevant safe work method statement(s); and
 - if the work is not carried out in accordance with the safe work method statement(s), that the work ceases (when safe to do so) and does not resume until compliance with the safe work method statement is achieved.

Further information about the requirements for safe work method statements for 'high-risk construction work' is given in paragraph 5.

The meaning of the term 'high-risk construction work' is set out on page 10.

4. What else do main contractors need to know about the new regulations?

(a) Responsibilities of clients and designers

Main contractors should be aware that clients commissioning design and/or construction work as part of a trade or business (referred to in the regulations as 'commercial clients') are required to consult with both the designer and the main contractor about the occupational safety and health aspects of the construction project. The purpose of the consultation is to ensure, as far as practicable, that the construction work can be done without risking the health and safety of anyone at or near the construction site.

Further information on the client's obligation to consult is given in the document *"The National Standard for Construction Work - guidance for clients"*.

The new regulations require designers to give their 'commercial clients' a written report on the occupational safety and health aspects of their designs. The client must pass this information, together with any other occupational safety and health information the client may receive in connection with the project, to the main contractor and to anyone who obtains the end product of the construction work from the client.

Further detail about the information-giving responsibilities of commercial clients and the designer's obligation to report to the client on the health and safety aspects of the design can be found in the documents *"The National Standard for Construction Work - guidance for clients"* and *"The National Standard for Construction Work - guidance for designers"*.

(b) Joint responsibility

If more than one person has responsibility for ensuring safety and health at the construction site, then:

- each person must fulfil their responsibility to the extent that they control the construction project or the construction work;
- all must discharge their responsibilities in a co-ordinated manner; and
- each person must cooperate with all parties who have a responsibility concerning occupational safety and health at the construction site.

5. What responsibilities do other people with control of construction work have under the new regulations?

(a) Preparation of safe work method statements (JSAs) for all 'high-risk construction work'

People identified by the main contractor as having day-to-day on-site control of 'high-risk construction work' must, as far as practicable, give the main contractor a safe work method statement (also known as a Job Safety Analysis or JSA) for all high-risk construction work they are in charge of, and keep it updated. As far as practicable, JSAs for 'high-risk construction work' must be given to the main contractor before the work starts. Details of the information that must be included in a JSA for 'high-risk construction work' are given in paragraph 3(c) on page 8. The meaning of the term 'high-risk construction work' is set out below.

JSAs for 'high-risk construction work' should be reviewed whenever there is a change to the work. Arrangements must also be put in place to ensure that people undertaking 'high-risk construction work' at the site comply with the requirements of the relevant JSA(s).

The meaning of 'high-risk construction work'

The term 'high-risk construction work' is defined in the new regulations as meaning any of the following:

- Construction work involving a risk of a person falling two metres or more;
- Construction work on telecommunications towers;
- Construction work involving demolition;
- Construction work involving removing or disturbing asbestos;
- Construction work involving alteration to a structure that requires the structure to be temporarily supported to prevent its collapse;
- Construction work involving a confined space;
- Construction work involving excavation to a depth of more than 1.5 metres;
- The construction of tunnels;
- Construction work involving the use of explosives;
- Construction work on or near pressurised gas pipes (including distribution mains);
- Construction work on or near chemical, fuel or refrigerant lines;
- Construction work on or near energised electrical installations and lines (whether overhead or underground);
- Construction work in an area that may have a contaminated or flammable atmosphere;
- Construction work involving tilt-up or precast concrete;
- Construction work on or adjacent to roads or railways that are in use;
- Work on a construction site where there is movement of powered mobile plant;
- Construction work in an area where there are artificial extremes of temperature;
- Construction work in, over or adjacent to water or other liquids if there is a risk of drowning;
- Construction work involving diving.

(b) Joint responsibility

If more than one person has responsibility for ensuring safety and health at the construction site, then:

- i. each person must fulfil their responsibility to the extent that they control the construction project or the construction work;
- ii. all must discharge their responsibilities in a co-ordinated manner; and
- iii. each person must cooperate with all parties who have a responsibility concerning occupational safety and health at the construction site.

6. Other sources of information

(a) The Occupational Safety and Health Act 1984 and Occupational Safety and Health Regulations 1996

Copies of the *Occupational Safety and Health Act 1984* and the *Occupational Safety and Health Regulations 1996* can be purchased from State Law Publisher, 10 William Street, Perth [Tel. (08) 9321 7688 Website: www.slp.wa.gov.au]. Reference copies are also held in the WorkSafe library, 5th Floor, Westcentre, 1260 Hay Street, West Perth.

(b) The National Standard for Construction Work [NOHSC: 1016 (2005)]

Copies of the National Standard for Construction Work can be downloaded from the website of the Office of the Australian Safety and Compensation Council at www.ascc.gov.au.

(c) Commission for Occupational Safety and Health publications

- Guidance Note: *General Duty of Care in Western Australian Workplaces*
- Guidance Note: *Formal Consultative Processes at the Workplace*
- Code of Practice: *The Prevention of Falls at Workplaces*
- National Code of Practice for *Precast, Tilt-up and Concrete Elements in Building Construction*
- Codes of Practice: *First Aid, Workplace Amenities and Personal Protective Clothing and Equipment*

(d) Contact for further information

WorkSafe

5th Floor Westcentre
1260 Hay Street
WEST PERTH WA 6005
Telephone: 1300 307 877
TTY: (08) 9327 8838
Fax: (08) 9321 8973
Email address: safety@docep.wa.gov.au
Website: www.worksafe.wa.gov.au