

Black Diamond Drilling Services

Hazard Identification and Risk Management Standard

BDD-WHS-STD-002

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1 Introduction

1.1 Purpose

The purpose of this Standard is to define the process for hazard identification as well as the risk management framework, and to ensure that health, safety and environmental hazards and associated risks are identified, assessed, documented, controlled and communicated in an effective manner to all relevant key stakeholders.

It must be recognised that different Australian States and Territories, and different industry sectors may have their own specific requirements, obligations and terminologies.

1.2 Scope

This Standard applies to all BDD personnel, contractors and visitors who work at or visit any BDD project operation.

This procedure or any aspect of it may be overridden, varied, or not followed, at the discretion of BDD legal counsel or external legal counsel.

2 Definitions

Hazard

Something or a situation that has the potential to harm a person

Risk

The possibility that harm might occur when exposed to a hazard

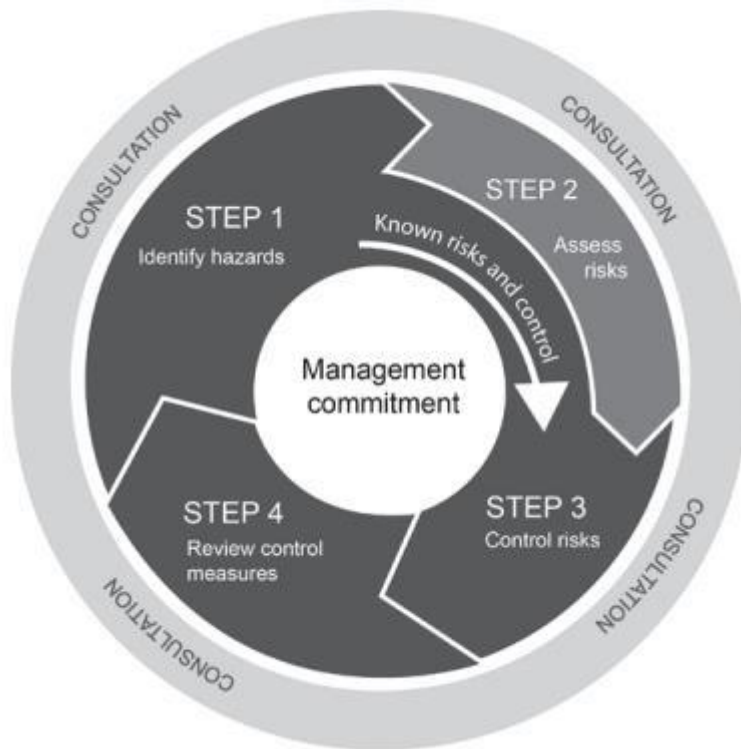
Risk Control

The actions taken to eliminate or minimise health and safety risks so far as is reasonably practicable

3 Procedural Requirements

3.1 General

This Standard and the Risk Management process used at BDD aligns with How to manage work health and safety risks Code of Practice as per below:



All levels of risk assessment (risk assessment tools) shall utilise this process.

Risk management should be undertaken for all activities where there is the potential for harm including:

- Before activities commence;
- Before the introduction of new equipment, procedures or processes;
- When equipment, procedures or processes are modified.

3.2 Step 1: Identify the Hazard

A hazard means a situation or thing that has the potential to harm a person. Hazards at work may include: noisy machinery, a moving forklift, chemicals, electricity, working at heights, a repetitive job, bullying and violence at the workplace (How to manage work health and safety risks Code of Practice 2011)

Hazard identification is the process of identifying all situations and events that could cause injury or illness by examining a work area/task for the purpose of identifying all threats which are 'inherent in the job'. Tasks can include, but may not be limited to using tools, hazardous chemicals, dealing with people, lifting/moving items and mustering.

Hazard identification can be completed by inspection the workplace, consulting with workers and reviewing available information from regulators, industry associations, unions, technical specialists, manufacturers and suppliers and safety consultants.

3.3 Step 2: Assess the Risk

Assessing the risk from a hazard determines its significance. A risk assessment can help determine:

- How severe a risk is
- Whether any existing control measures are effective

- What actions you should take to control the risk
- How urgently the action needs to be taken

How to conduct a risk assessment

All hazards have the potential to cause different types and severity of harm, ranging from minor discomfort to serious injury or death.

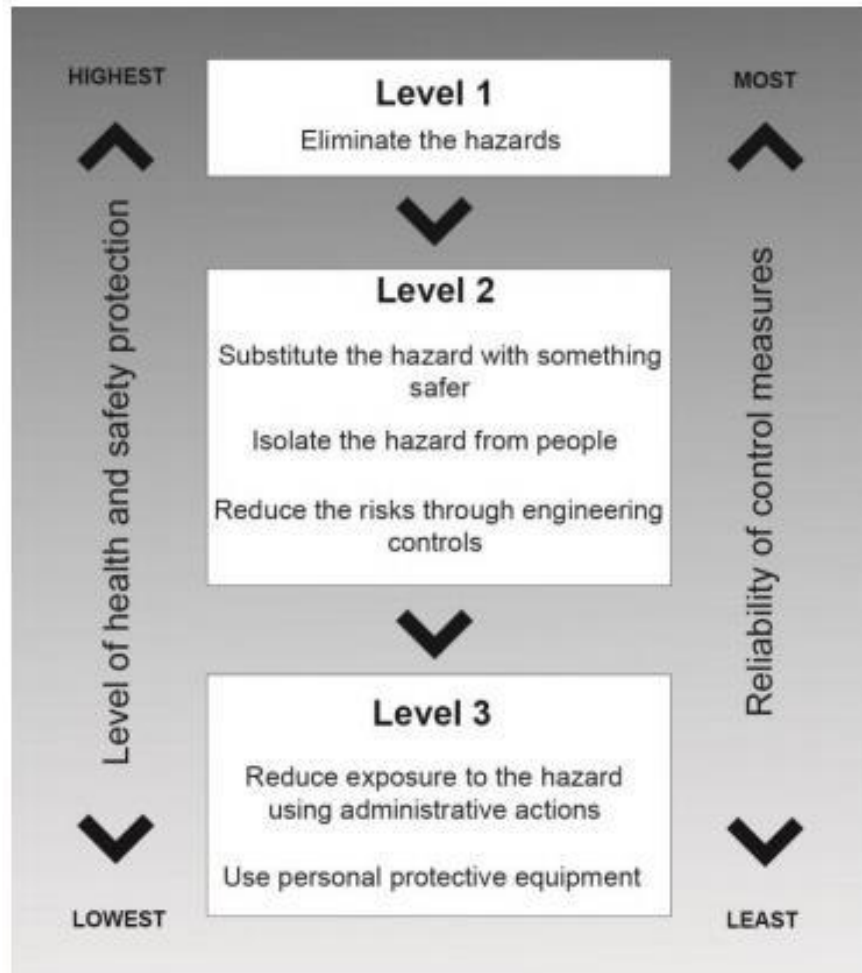
The risk rating matrix is to be used to assess risks by determining the likelihood of harm being caused with the consequence of the harm caused by the hazard.

		Consequence				
		Negligible No injury/illness	Minor First Aid Injury	Moderate Temporary loss of function	Major Permanent loss of function	Catastrophic Loss of life
Likelihood	Almost Certain At least once per week	Medium	High	High	Extreme	Extreme
	Likely At least once per month	Medium	Medium	High	Extreme	Extreme
	Possible Could occur at least once in 12 month	Low	Medium	Medium	High	High
	Unlikely Might occur at least once in 5 years	Low	Medium	Medium	Medium	High
	Rare May occur once in 5 years or more	Low	Low	Low	Medium	Medium

Low	<p>Authorisation by Supervisor</p> <p>The proposed task or process can proceed, provided that:</p> <ol style="list-style-type: none"> 1. The risk level has been reduced to as low as reasonably practicable using the hierarchy of risk controls. 2. A documented procedure has been prepared and authorised
Medium	<p>Authorisation by Manager</p> <p>The proposed task or process can proceed, provided that:</p> <ol style="list-style-type: none"> 1. The risk level has been reduced to as low as reasonably practicable using the hierarchy of risk controls. 2. A Safe Working Procedure or a Safe Work Method has been completed and authorised.
High	<p>Authorisation by Executive Manager</p> <p>The proposed activity can only proceed, provided that:</p> <ol style="list-style-type: none"> 1. The risk level has been reduced to as low as reasonably practicable using the hierarchy of risk controls. 2. A review has been conducted: Legislation, Codes of Practice, Australian Standards, Manufacturers Guidance 3. A Safe Work Method has been completed and authorised. 4. A manager must review and document the effectiveness of the implemented risk controls throughout the task/activity
Extreme	<p>DO NOT PROCEED</p> <p>The proposed task or process activity must not proceed. Steps must be taken to lower the risk level to as low as reasonably practicable using the hierarchy of risk controls</p>

3.4 Step 3: Identify and Implement Control Measures

The way of controlling risks are ranked from the highest level of protection and reliability to the lowest. (see below). The ranking is known as the hierarchy of risk control.



Ref: How to manage work health and safety risks Code of Practice 2001

Control measures for WHS/OHS hazards should be implemented as required using the following hierarchy of control, in order of preference these measures relate to:

- Elimination (removal of the hazard)

- Substitution (substitute the hazard for something which is less hazardous e.g. Replace a hazardous chemical with one which is not hazardous)
- Isolation (isolate the hazard from people e.g. Place a noisy piece of equipment in another location)
- Engineering (e.g. Guarding on machinery)
- Administrative (e.g. Provision of training, policies and procedures, signage)
- Personal protective equipment (e.g. Use of hearing , eye protection, high visibility vests).

3.5 Step 4: Monitor and Review

Outcomes of risk assessments will be documented, and the control measures reviewed at least annually or earlier should a task or activity be the subject of a WHS/OHS incident or a change of process or requirement. Current risk assessments will ensure that Australia Wide Constructions achieves the goal of eliminating or minimising the risk workers may be exposed to.

4 Risk Assessment Tools

Utilising the above methodology, there are four levels of risk assessment (risk assessment tools) that make up the Risk Management Framework. The type of risk assessment tool used depends on the potential severity of harm that could occur and the likelihood of occurrence. The lowest level risk assessment tool (Level 1) has been designed to be used for task-based risks to enable the workforce to identify hazards and nominate the controls to be implemented to control the hazards. This tool is designed to be used prior to undertaking any task and provides for an escalation leading to the JSA tool, if the hazards cannot be controlled at the task level or within the control of the person intending on performing the task.

4.1 Level 1: TAKE 5

Philosophy

- Pre-job evaluation of risks performed by workers
- Places job planning into hands of workers
- Encourages group participation and shared learning
- Enhances workers' ownership of safety program
- Facilitates best approach to work execution

General Requirements

- Workers shall conduct/participate in a TAKE 5 prior to the start of each new task or activity
- Workers undertaking a TAKE 5 shall sign the completed assessment, indicating their understanding of its content
- The completed TAKE 5 shall be made available for review in the immediate work area
- Completed TAKE 5 Cards are to be returned to the immediate supervisor by the end of each shift or on completion of the task. Supervisors shall review the TAKE 5 cards for completion and adequacy
- The relevant Supervisor shall forward completed TAKE 5 cards to the area Supervisor by the end of each shift roster
- The area Supervisor shall review the TAKE 5's any issues of concern, patterns/trends in the application of additional risk controls or opportunities to improve current work practices

Process

The requirements for performing a TAKE 5 review are as follows:

- Observe unsafe work in progress
- Stop the work and commence TAKE 5 review
- Advise immediate supervision of the TAKE 5 review and ensure that they are in attendance
- The workers and supervisors determine the reasons why unsafe work occurred
- A new TAKE 5 card is completed and agreed to by all workers
- All personnel involved sign the TAKE 5 Card
- TAKE 5 is reviewed for opportunities to improve the WSHMS and share learnings
- Initial TAKE 5 Card is filed for records
- Personnel are allowed to return to work

Where a hazard, identified as part of the TAKE 5 process, cannot be adequately controlled or a significant risk to personnel, plant and/or equipment is identified, a JSA shall be conducted.

4.2 Level 2: Job Safety Analysis (JSA)

The JSA will be conducted for all tasks that contain steps, which may pose a risk to personnel.

The specific steps of the job that pose the risk will be analysed, the hazards and risks evaluated, and controls proposed.

The JSA will be included as part of a work plan or work package and the requirements of the JSA will be incorporated into plans, procedures and work instructions as appropriate.

A JSA of specific jobs or operations is required for, but not limited to, the following:

- High-risk jobs
- Jobs or tasks that have no current procedures in place or are being done for the first time
- New jobs or tasks that present unspecified or unknown hazard
- Jobs or tasks involving new equipment, machinery, or procedures
- Major job categories that will be repeated frequently;
- Jobs or tasks that have historically experienced a repeated or significant rate of accidents, injuries, exposures, or near misses; and
- Jobs or tasks that, in the professional judgment of the Supervisor, WHS Managers or Client WHS Manager, require a JSA

4.3 Level 3: Safe Work Method Statement (SWMS)

The primary purpose of a SWMS is to help supervisors, workers and any other persons at the workplace to understand the requirements that have been established to carry out the high risk construction work in a safe and healthy manner.

The SWMS:

- Sets out the work activities in logical sequences
- Identifies hazards
- Describes control measures

Any high risk work with connection with a construction project is required under the Work Health and Safety Regulation to:

- Ensure that a safe work method statement (SWMS) is prepared before the proposed work starts

- Make arrangements to ensure that the high risk construction work is carried out in accordance with the SWMS
- Ensure that a copy of the SWMS is given to the principal contractor before the work starts
- Ensure that a SWMS is reviewed and revised if necessary
- Keep a copy of the SWMS until the high risk construction work is completed.

4.4 Level 4: Workplace Risk Assessment and Control (WRAC)

Formal risk assessments shall be also be used where risks are assessed as unacceptable by the previous level of risk assessment.

Risks are assessed in depth and using the experience and knowledge of the assessment team, further controls are developed in an effort to reduce the risk to acceptable or as low as reasonably practicable (ALARP)

Formal risk assessments are also used when conducting a review on the effectiveness of the Safety Management System.

5 Consultation in Risk Management

As required by the WHS/OHS Act, Black Diamond Drilling Services will consult, so far as is reasonably practicable with workers who carry out work for AWC and are or likely to be directly affected by a work health and safety matter. Refer to the Consultation and Communication Standard for more information.

6 Workplace Inspections

WHSOs/Safety Advisors will complete an annual workplace inspection utilising a pre-determined checklist and report their findings to their direct Manager via email. If necessary,

a Manager or supervisor with responsibility for that workplace / work area or a safety representative or employee/contract employee may accompany the WHSO/Safety Advisor during the inspections.

7 Attachments

- Nil

8 References

- State and Territory industry sector legislation
- Code of Practice – How to manage work health and safety risks (2011)
- Code of Practice – Work health and safety consultation, co-operation and co-ordination (2011)
- WorkSafe Vic - Controlling OHS Hazards and Risks – A Workplace Handbook
- BDD Consultation and Communication Standard
- BDD Workplace Inspection