



WHS Risk Management Framework policy

Health and Safety Branch
People and Culture Directorate

Policy no [inserted by Governance Branch]
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1 Purpose

Work Health and Safety (WHS) risk management is a decision-making process to systematically identify, analyse and evaluate options to treat health and safety (H&S) risks that arise because of FRNSW's undertakings. This policy provides the methodology for managers (at all levels) to ensure that H&S risks are managed for their respective workplaces. Further, this policy establishes the framework necessary to ensure that significant H&S risks are communicated to an appropriate level for action.

2 Scope and application

This policy outlines the WHS Risk Management Framework which is a key element of the Be Safe Health and Safety Management System (HSMS). The framework provides the basis for the management of health and safety risks; these are the risks that have potential consequences in terms of loss of life, injury or negative effect on health.

The WHS Risk Management Framework applies to all activities, augmenting FRNSW's management of operational safety risks through the Incident Management System and the associated operational risk management cycle.

3 Legal and policy framework

3.1 Legal framework

In accordance with the [Work Health and Safety Act 2011 \(NSW\)](#), all health and safety risks must be:

- eliminated *so far as is reasonably practicable* (SFAIRP)¹; or
- minimised so far as is reasonably practicable, if it is not reasonably practicable to eliminate them.

These obligations apply to workers and to others that are potentially placed at risk by any FRNSW undertaking. Additional obligations for the proactive management of specific health and safety risks also arise under the [Work Health and Safety Regulation 2017 \(NSW\)](#)².

¹ For a detailed outline of SFAIRP see section 5.3.1.

² Specifically, *WHS Regulation*, Ch 3, Pt 3.1 (*Managing risks to work health and safety*).

3.2 Policy framework

3.2.1 Work, Health and Safety Policy (CG10-003)

The WHS Policy endorses a systematic approach to the management of FRNSW's health and safety risks through the implementation of the Be Safe Health and Safety Management System (HSMS). The functions defined under this policy contribute towards an integrated approach to the management of these risks.

3.2.2 FRNSW Risk management policy (CG06-004)

In compliance with the NSW public sector requirements laid down by [Treasury Policy Paper 15-03](#), establishes the organisation's approach to the management of risk. This policy will provide the framework for the management of FRNSW's health and safety risks in accordance with both higher-level instructions. In doing so, WHS risk management processes will be aligned with the AS ISO 31000:2018 standard.

3.3 Industry standard – AS/NZS ISO 45001:2018 - *Occupational health and safety management systems: Requirements*

To ensure FRNSW's approach to health and safety is aligned with best practice methods, the Be Safe HSMS has been designed in compliance with the 45001 HSMS standard. Both internal and external review processes for the HSMS will ensure the system remains aligned with this standard.

4 Policy principles

4.1 Consultation, cooperation and coordination

Appropriate and timely involvement with relevant stakeholders, decision makers and those directly affected by the health and safety risk increases the effectiveness of risk management activities. Consultation on health and safety risks is also a broadly applied legal obligation under the *Work Health and Safety Act 2011* (NSW).

Effective consultation involves drawing on experience, knowledge and ideas from others, particularly workers. Additional engagement with relevant specialist areas, subject matter or technical experts, both internal and external, will also assist decisions being based on best available information.

4.2 Risk decision making generally

In line with FRNSW's corporate risk management policy, the management of H&S risks is part of decision making at all levels of the organisation. For many activities, a formal risk-based decision on the acceptability of a H&S risk by an appropriate decision-maker will be required.

An informed risk decision can occur following a deliberate consideration of the nature and scope of the hazards involved, the most appropriate and effective controls and treatments, and the organisation's appetite for potential outcomes.

From a corporate governance perspective, it is vital that risk decisions are made at an appropriate level. Appropriate referral to a higher level for an evaluation of the risk is a positive demonstration of both risk awareness and effective H&S communication.

An established risk decision-making system is therefore fundamental to the broader risk management process, providing the following benefits:

- elevation of risk decisions to the appropriate level.
- creation of a trail of accountability.
- assurance that H&S risk decisions that represent comparable levels of risk are generally made at a comparable level of leadership.
- promotes timely and informed decisions on critical H&S hazards.

4.3 WHS risk management principles

For the RM process to be effective, communication and consultation with stakeholders is required. Additionally, the risks and their controls need to be systematically monitored and reviewed to: (1) ensure that the risk treatment is being applied; and (2) the applied risk treatment reduces the risk to the legal standard of 'reasonably practicable' to personnel So Far as is Reasonably Practicable (SFAIRP).

FRNSW's Risk Management policy provides instruction on the inclusion of risk management functions in decision-making across strategic level financial, capability, reputational and safety considerations. The Health and Safety Branch is responsible for ensuring that the organisation's management of health and safety risks is consistent with: (1) FRNSW's legal obligations under the WHS Act; and (2) higher-level internal policy.

The WHS Risk Management Framework is, therefore, a key element of the Be Safe Health & Safety Management System (HSMS); providing the structure for the identification, elimination and mitigation of workplace health and safety hazards at FRNSW. To ensure these objectives are systematically achieved, it outlines processes for the documentation, analysis, escalation, review, monitoring and governance of H&S risks within the organisation.

In line with the AS31000:2018 risk management standard, the framework has been designed to incorporate the following principles:

Table 1: FRNSW H&S Risk Management Principles

Principle		Context
1.	Identification of 'reasonably foreseeable' H&S hazards	Reasonably foreseeable H&S hazards (Critical/Significant) are documented in H&S Risk Registers.
2.	H&S risks will be addressed to the legal standard (SFAIRP)	Appropriate controls are identified for WHS risks arising from FRNSW's undertakings as an emergency services organisation, and accountability and responsibility assigned for implementation.
3.	H&S risk controls will: (1) demonstrate elimination over minimisation; and (2) be aligned with the 'hierarchy of controls'	The hierarchy of controls will be applied to the management of all H&S risks to eliminate them, so far as is reasonably practicable, and if not practicable, minimise their impact so far as is reasonably practicable.
5.	Unnecessary risk will not be retained	These are risks that have no commensurate return in benefit or opportunity. Additionally, FRNSW has a duty to eliminate H&S risks to workers that cannot be justified.
6.	Risk acceptance occurs when the benefits outweigh the potential costs	A task or activity should only be undertaken when the importance and benefits of conducting it outweigh the associated H&S risk. That said, the organisation should not be risk averse; even high-risk activities or tasks can be undertaken when there is a legitimate and justifiable need.
7.	Risk decisions (i.e. acceptance) occurs at an appropriate level	As the level of risk increases the level of authority to retain the risk also increases. The level of assessed risk that can be retained at a given level of authority is the 'risk retention threshold'.
8.	Significant H&S risk management processes are documented	Documentation of risk assessments and decisions will improve accountability, communication and organisation learning towards key H&S risks.

5 WHS risk management processes

WHS risk management should be planned, systematic and cover all reasonably foreseeable hazards and associated risks. It is a continuous, cyclical process that facilitates review and improvement.

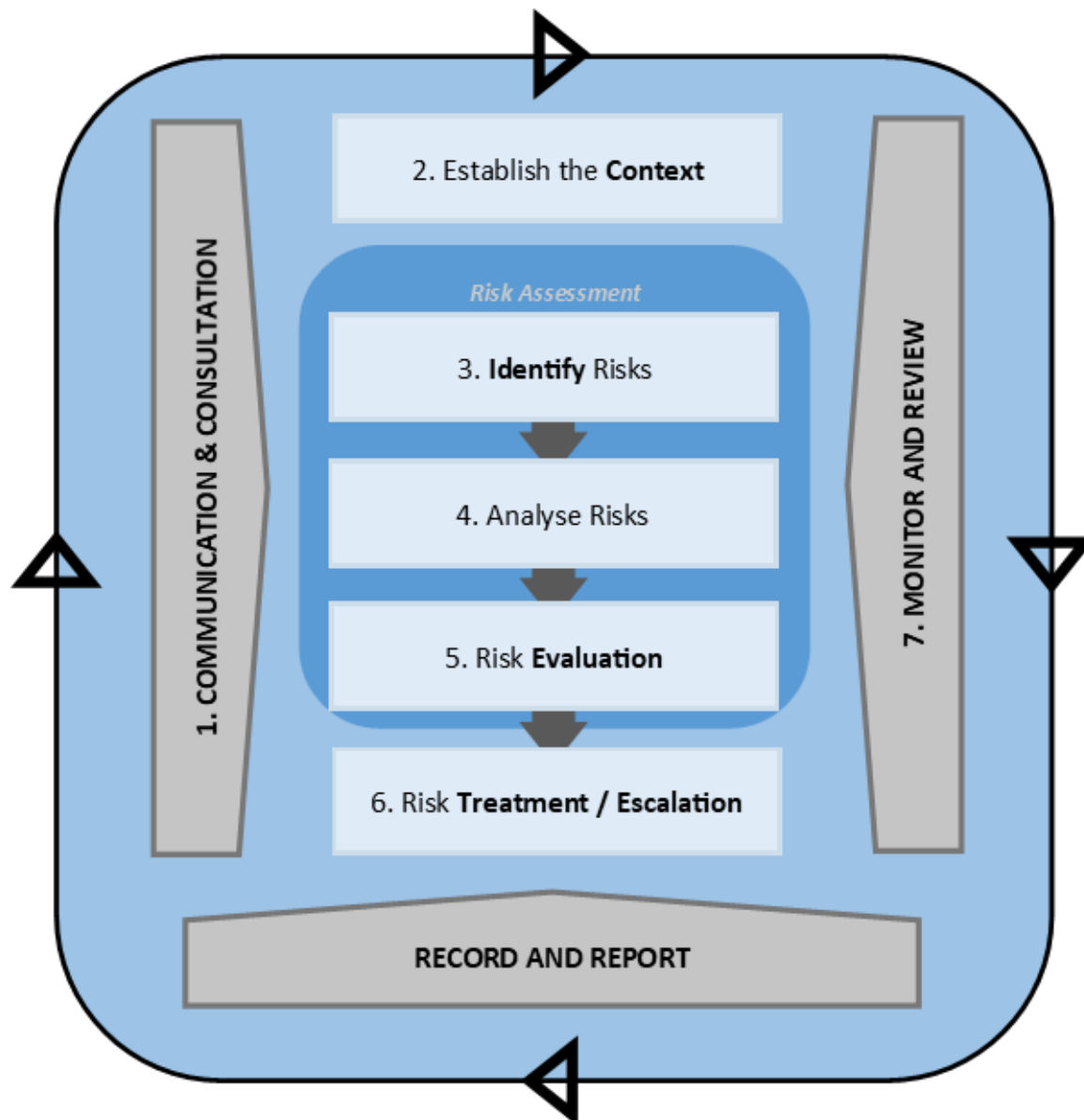


Figure 1: The WHS Risk Management Process (adapted from AS ISO 31000:2018).

5.1 The risk management process

1 Communication and consultation. Ongoing communication with stakeholders (including affected workers) improves the viability of outcomes for the process.

2. Establish the context. This step involves the setting of parameters within which the risk management process will be applied and establishes an important basis for the risk decision. Many FRNSW undertakings are by their nature inherently hazardous and, in some cases, the elimination of such hazards may not be reasonably practicable considering the organisation's core capability functions.

3 Identify risks. Sources of risk, areas of impact and events (including organisational changes) are identified along with causes and potential consequences.

4 Analyse risks. The overall objective of this process is to separate tolerable risks from those that require further treatment. The sources, consequences and likelihood of risks are considered against the mitigating effect of existing risk treatments.

5 Risk evaluation. A risk is evaluated against a standardised risk criteria to determine if it is tolerable or requires either further treatment or elevation to a higher level in the organisation prior to acceptance. The extent of the opportunity that may arise from accepting the risk (i.e. capability requirements) is a key consideration. The legal standard applied by the *WHS Act* for risk acceptance (SFAIRP) prevents the application of pre-determined tolerability levels that cease risk treatment when reasonably practicable measure would further reduce the risk.

6 Risk treatment or escalation.

Risk treatment. A risk treatment is any act or resource that can be applied to reduce the likelihood or consequence of a specific risk. The law requires a duty holder to either eliminate a risk to health and safety, or if this is not reasonably practicable, to minimise the risk to the SFAIRP standard. This requires the application of the hierarchy of controls.³

Risk escalation. Escalation of risks will inform the appropriate level of management about emerging risks or establish risks that are subject to changing circumstances. This will ensure that suitable consideration and action occurs, and that broader organisational impacts are contemplated.

7 Monitor and review. The effectiveness of treatment measures is monitored alongside a review of the circumstances of the associated activity to identify potential exposures to new risks.

8. Record and report. The outcomes of the risk management process are recorded and communicated to appropriate leaders and stakeholders. (See 5.2 Documentation below)

5.2 Documentation

5.2.1 Documentation of risk activity and decision-making

A documented approach to H&S risk provides an auditable decision-making trail that provides evidence of compliance. This can also operate to support planning and communication processes and enhance corporate knowledge on key H&S hazards. Documentation of risk assessments and decisions through a system of risk registers will:

- provide more effective communication of H&S hazards and risks associated with a FRNSW undertakings.
- provide a systematic basis for the application of the legal standard of 'reasonably practicable' to key H&S risks.
- support risk decisions when operational or organisational conditions change.

³ *Work Health and Safety Regulation 2017* (NSW) cls 36.

- support operational (dynamic) risk management processes by proactively managing static risk controls such as the training, equipment and procedures that are in place prior to the incident.
- improve understanding and management of critical risk controls.

The Framework applies this principle by recording risk decision-making through risk registers and Bow-tie analysis diagrams for critical risks, and safety risk assessments for tasks and activities that fall outside the norm.

5.2.2 Critical Risks

Critical Risk Register.

The FRNSW Critical Risk Register (CRR) will record key organisational information on significant workplace hazards, the risks that are derived from those hazards, and the risk controls in place (or alternatively required to be in place) to mitigate those risks. Registers facilitate:

- acceptance for high-risk undertakings to occur at an appropriate level that align with the objective legal standard;
- reviews of the risks associated with the operation of the system and the effectiveness of the management framework; and
- an important reference when examining how change will affect existing risks or controls.

With respect to the role of the CRR within the BE Safe HSMS, the analysed risk controls will form the basis for revision of physical and procedural risk controls for significant workplace hazards, reducing the number of untreated risks. From a compliance perspective, the Critical Risk Register provides a vital record of decision-making to address specific workplace risks and safety management process generally.

Bow-tie Risk Analysis (BTA)

BTA forms part of the CRR process and is used to model the elements (threats, consequences and controls) for critical risks. The diagrams offer a graphical representation (and record) of a risk and associated controls. Benefits of utilising bow-tie analysis for key risks include:

- a concise visual representation of the variable elements of a risk and its controls (both existing and potential);
- easy identification of critical controls and control effectiveness;
- ability to prioritise areas requiring additional monitoring and assurance; and
- facilitation of input from hazard or task subject matter experts.

(See example BTA diagram at Appendix A).

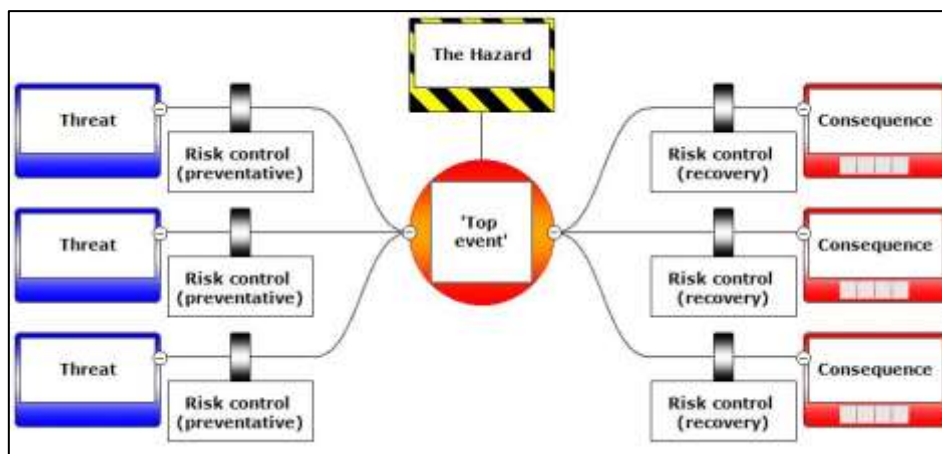


Figure 2: Bow Tie Diagram

5.2.3 Workplace safety risk register

A Workplace safety risk register is a record of identified hazards in a particular area or directorate. The register should contain the significant health and safety risks that affect the directorate's objectives and functions, and the approved risk assessments completed by the directorate.

The register includes the risk level and the controls implemented to eliminate or minimise the risks associated with a hazard and who is responsible for ensuring control measures are still appropriate and have been implemented in a reasonable time. Registers should be available to workers who may be exposed to the hazards recorded and reviewed regularly, such as during annual workplace inspections.

5.2.4 Workplace safety risk assessment (WSRA)

Most routine activities can be conducted under the auspices of approved risk levels determined through the Critical Risk Register process or existing risk controls contained in doctrine. Where more complex or highly unusual tasks are assigned or conditions are fall outside of the normal operating conditions, an WSRA is needed in order to determine the residual risk level involved in the task.

Workplace supervisors and managers are responsible for ensuring the risk management process is undertaken within their area of control. This process should occur:

- when doctrine does not provide enough information or guidance for the management of hazards arising from an activity;
- when using new or changing existing workplaces or environments;
- before planning or changing FRNSW practices or procedures;
- before purchasing or using new or used plant, equipment or substances;
- whenever new information becomes available regarding workplace risks;
- when conducting inspections of FRNSW workplaces;
- when responding to workplace concerns raised by workers or others;
- when responding to workplace incidents (whether they result in injury or not); and
- when required by WHS regulations for specific hazards and high-risk work.

5.3 Risk acceptance

5.3.1 So Far as is Reasonably Practicable (SFAIRP)

Reasonably practicable is the legal standard applied to determine if a Person Conducting a Business or Undertaking (PCBU), like FRNSW, has adequately discharged its duty to ensure health and safety risks are eliminated or if that is not practicable, sufficiently mitigated.

In effect, this is an objective test, to ensure FRNSW systematically evaluates all relevant matters before deciding to accept a level of risk. Any consideration as to the cost associated with eliminating or minimising the risk is explicitly restricted until after the other factors have been 'weighed up'.

The legal standard for risk acceptance under the *WHS Act*:

So Far as is Reasonably Practicable (SFAIRP)

1. Assess } The 'Risk' likelihood of harm.
2. Assess the } degree of harm.
3. Identify *potential* risk controls that will eliminate the risk.
4. Identify *potential* risk controls that will minimise the risk.
5. Assess suitability & availability of proposed risk controls.
6. Assess effectiveness of controls based on hierarchy of controls:
 - Elimination
 - Substitution
 - Isolation
 - Engineering
 - Administrative (i.e. SOP, supervision, training)
 - PPE

THEN, AND ONLY THEN:

7. Is the cost (financial, time, manpower) grossly disproportionate to the potential reduction in risk to be gained?

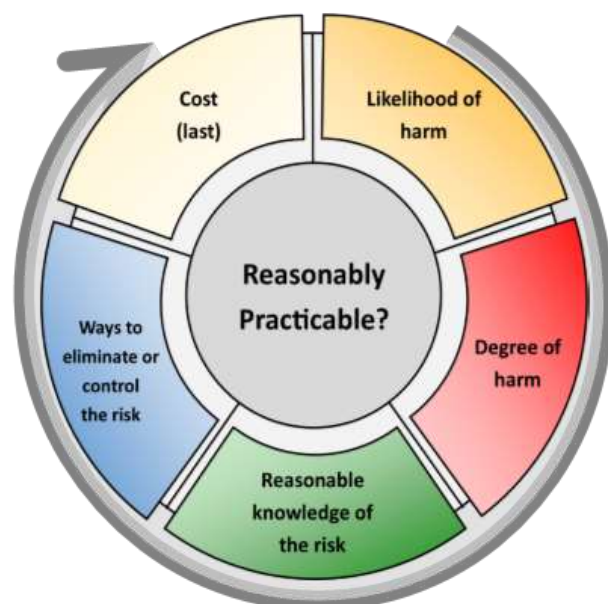


Figure 3: SFAIRP

5.3.2 Hierarchy of risk controls

A step in the SFAIRP process involves the consideration of the adequacy/effectiveness of current or potential control measures against the Hierarchy of Controls.⁴

⁴ This requirement is specifically applied by cls 36 of the *Work Health and Safety Regulation 2017*.

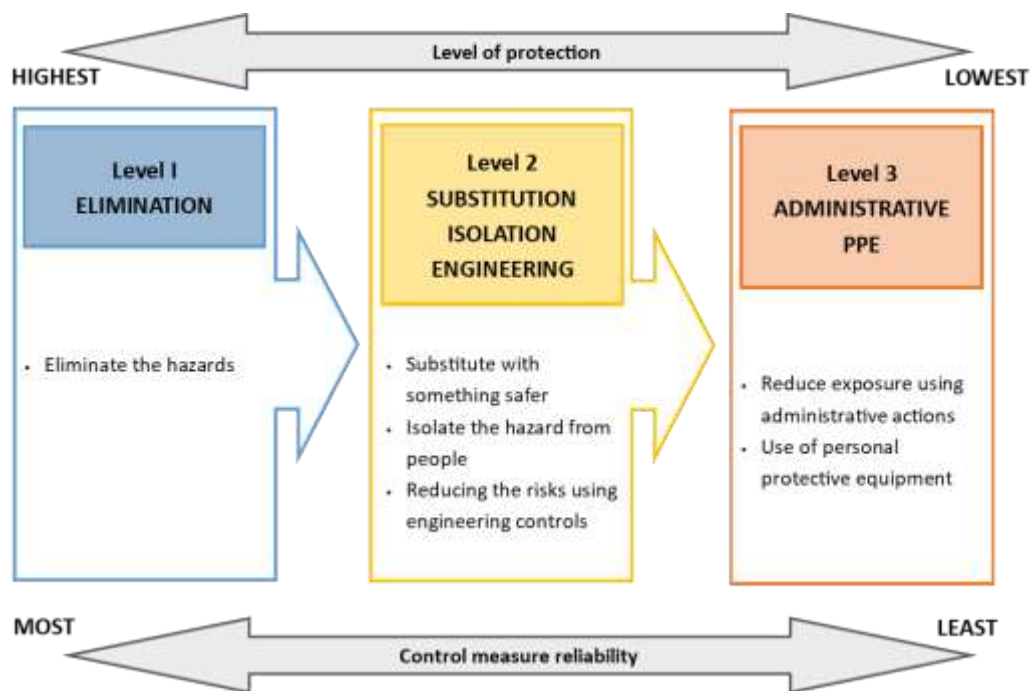


Figure 4: The Hierarchy of Controls

When considering risk control measures, the hierarchy of controls should be applied from most effective to least effective as follows:

- **Elimination.** The most effective control measures will eliminate the risk entirely (level 1 controls). This can be done by not introducing the hazard or not conducting the associated task.
 - Examples of risk elimination are:
 - conducting work at ground level to eliminate risk of falls; or
 - design out hazards in development phase of a product, task or workplace.
- If it is not reasonably practicable to eliminate a risk, the risk must be minimised SFAIRP, by implementing one or more level 2 controls:
 - **Substitution.** Substitute (wholly or partly) the hazard that gives rise to the risk with something that gives rise to a lesser risk
 - e.g. substituting a hazardous chemical with something less harmful.
 - **Engineering.** An engineering control is physical in nature, including a mechanical device or process
 - e.g. using mechanical devices such as trolleys or hoists to move heavy objects.
 - **Isolation.** Physical separation of the hazard from people
 - e.g. by distance or by barriers.
- If a risk remains following the application of Level 2 controls, it must be minimised SFAIRP using the following level 3 controls (in order of precedence):
 - **Administrative.** Work methods or procedures that are designed to minimise a risk.

- e.g. checklists, signage and training.
- **Personal protective equipment (PPE)**. PPE limits harmful exposure to a hazard when suitable to task and worn correctly.
 - e.g. earmuffs, gloves, safety glasses and helmets.

6 Roles and responsibilities:

6.1 The Executive Leadership Team (Commissioner, Deputy Commissioners and Executive Directors)

Senior executives hold the responsibility for Be Safe HSMS implementation in their respective areas of responsibility. With respect to risk management, specific responsibilities include:

1. Monitor and review conformance with this policy and associated Be Safe HSMS requirements;
2. Monitor and review the implementation of key WHS risk controls; and
3. Provide the resources necessary to support the objectives of this policy.

6.2 Managers and supervisors

Managers and supervisors at all levels must:

1. Proactively respond to WHS risks in their areas;
2. Monitor, record and review the implementation of H&S risk controls;
3. Communicate (elevate) risks that require higher level approval;
4. Ensure adequate records are maintained on risk management processes for key WHS risks within their delegation; and
5. Provide the resources necessary to support the objectives of this policy.

6.3 Director, Work Health and Safety (DWHS)

DWHS has the responsibility for the ongoing development and improvement of the Be Safe HSMS. From the perspective of WHS risk management, these responsibilities include:

1. Develop and maintain the policy and procedures necessary to support the objective of the WHS Risk Management Framework;
2. Provide technical support and advice on WHS risk management;
3. Support verification processes that promote record keeping practises on risk management of key WHS risks;
4. Through the Due Diligence Framework (verification), provide senior leaders with consolidated reporting on key WHS risks; and
5. Allocate Health and Safety Branch (HSB) staff as required to support points 1 thru 4.

7 Training and support

Health and Safety Branch will provide support to staff requiring assistance with health and safety risk management through Superintendent Operational Safety or Manager Strategic Safety.

8 Monitoring and review

Health and Safety Branch will monitor the effectiveness of this procedure through the review of risk register, risk assessments and audits conducted under the Be Safe HSMS.

9 Further information

Contact the Safety Team for further information on this procedure (02) 9265 2800.

10 Document information

10.1 Related documents

Work, Health and Safety policy

FRNSW Risk Management policy

WHS Risk Management procedure

10.2 Document control

Policy Manager	Director, Work Health and Safety
Contact Officer	Manager Strategic Safety
Contact No	(02) 9265 2839
Document type	Policy
Applies to	<input checked="" type="checkbox"/> Permanent Firefighters <input checked="" type="checkbox"/> Retained Firefighters <input checked="" type="checkbox"/> Community Fire Unit Members <input checked="" type="checkbox"/> Administrative and Trades Staff <input checked="" type="checkbox"/> Contractors and Consultants
Status	Draft
Security	Unclassified
File Reference	NFB/[File no.]
Review Date	[Select date – usually 3 years from date of issue]
Rescinds	Workplace safety risk management procedure
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10.3 Revision history

Version	Date	Status	HPE RM Ref	Details
01 Draft A	[Select date]	Draft	[Record no.]	[Enter details]

11 Appendix A: Example Bow-tie Analysis Diagram

