

Business Procedure

Hazard Management Document Number – OHS-PROC-33

This document applies to the following sites:

All Sites	<input type="checkbox"/>				
Rockhampton Office	<input checked="" type="checkbox"/>	Brisbane Office	<input checked="" type="checkbox"/>	Tarong Site	<input checked="" type="checkbox"/>
Barron Gorge Hydro PS	<input checked="" type="checkbox"/>	Kareeya Hydro PS	<input checked="" type="checkbox"/>	Mica Creek PS	<input checked="" type="checkbox"/>
Koombooloomba Hydro PS	<input checked="" type="checkbox"/>	Swanbank PS	<input checked="" type="checkbox"/>	Mackay Gas Turbine	<input checked="" type="checkbox"/>
Wivenhoe Small Hydro PS	<input type="checkbox"/>	Stanwell PS	<input checked="" type="checkbox"/>	Meandu Mine	<input type="checkbox"/>

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1.0 Purpose

This Business Procedure defines Stanwell's minimum mandatory requirements for identifying, assessing, managing and controlling health and safety risks. This Business Procedure is consistent with the Business Procedure: Risk Management Framework GOV-PROC-37.

2.0 Scope

This Business Procedure applies throughout Stanwell, all its sites and all activities under Stanwell's control. It applies to all Stanwell employees and contractors, including visitors to Stanwell workplaces.

This Business Procedure does not currently outline the interaction of hazard management processes with the site Safe Work Systems (SWS). This procedure will be updated upon completion of the consolidation of the SWS across Stanwell. Refer to the site SWS (Authority to Work or Permit to Work) for current site specific information on the hazard management interface with the SWS.

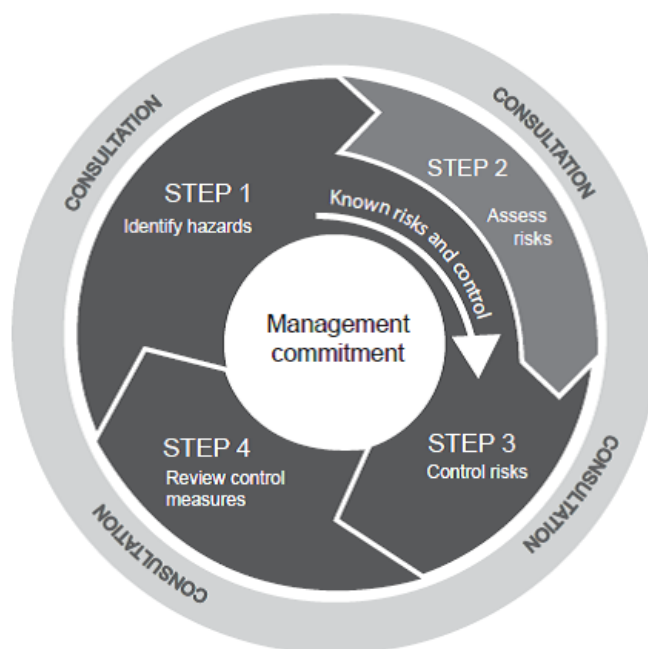
3.0 Actions

Sites must plan for hazard management and make provision to resource this function adequately by:

- delivering hazard management training;
- making sure that hazard management roles and responsibilities are defined and recorded in position descriptions;
- scheduling, as required, key hazard management activities, such as, hazard studies, hazard reviews, compliance audits and inspections;
- establishing a process to monitor and evaluate the effectiveness of defined control;
- consider hazard profile information in health and safety programs / initiatives; and
- employing competent workers to assist with hazard management activities.

Sites must, as far as reasonably practicable, implement the basic four step risk assessment process:

- identify health and safety hazards;
- assess the health and safety risks involved;
- implement suitable control measures to make sure health and safety risks are eliminated, or else controlled and monitored, in accordance with legal requirements and the hierarchy of risk control to achieve the highest level of protection; and
- review control measures.



3.1 Identify Hazards

Sites must undertake comprehensive hazard identification for all risk assessments and use a range of hazard identification methods. For example refer to Appendix B: Sources of Potentially Damaging Energy for focused questions utilising the 11 energies for the identification for all risk assessments. Where applicable, the following documentation and information should be considered:

- health and safety audits;
- health and safety inspections;
- incident, hazard and near hits reports, including investigations and trend analysis;
- consulting with workers and technical experts;
- health monitoring;
- industry and similar project/work safety incident history;
- hazard / risk workshops; and
- previous risk assessments.

As a minimum, sites should conduct hazard identification when:

- changing work practices, procedures or the work environment;
- purchasing new or used equipment or using new substances;
- designing and planning products, processes or places used for work;
- planning to improve productivity or reduce costs;
- new information about workplace risks becomes available;
- responding to workplace incidents, hazard and near hit reports;
- responding to concerns raised by workers, health and safety representatives or others at the workplace; and
- required by the Queensland Work Health and Safety Regulations 2011 for specific hazards.

3.2 Assess Risks

Activities that have the potential to pose health and safety risks must be risk assessed. Refer to the site Safe Work System or hazard management procedures for guidance on which tasks require risk assessments. Risk assessments must consider the consequence if someone is exposed to a hazard and the likelihood of it happening. A risk assessment will determine:

- the risk tolerance level of a risk;
- whether the risk tolerance level is tolerable; and
- what controls should be implemented to control the risk.

Sites should ensure that all workers involved in the work activity are involved in the hazard identification and risk assessment. Sites must also make sure that simultaneous operations (SIMOPS) are considered and workers performing SIMOPS are consulted.

3.2.1 Task Risk Assessments

Sites should ensure that, as a minimum, a task risk assessment, for example SafeStart, is undertaken prior to a job commencing (refer to the site Safe Work System for guidance on which tasks require a task risk assessment). The development of the task risk assessment should:

- involve the people performing the work task;
- take place where the work task will be performed and immediately before the work task will be performed;
- involve inspection of the work area to identify any changes that introduce additional hazards specific to the immediate work environment; and
- if required, additional controls implemented for hazard identified.

Sites must make sure that:

- work activities are monitored to identify any changes in work environment, operations or methods that could introduce new hazards; and
- identified hazards and controls are communicated to other work groups that may be affected.

3.2.2 Safe Work Method Statement (SWMS), Work Method Statement (WMS) and Job Safety and Environment Analysis (JSEA)

Sites must make sure that any work requiring a Permit to Work (PTW) or Authority to Work (ATW) including High Energy High Impact (HEHI), Construction or High Risk Construction activities, must have either a SWMS, WMS, or JSEA developed according to the site Safe Work System. As a minimum, a SWMS/ WMS/ JSEA must identify:

- the work activity, including a description of the activity;
- workers involved in the development of the SWMS/ WMS/ JSEA;
- the sequential breakdown of the tasks involved in the work activity;
- hazards identified for each task step;
- agreed methods for controlling the risks, including responsibility for implementing and maintaining each control; and
- the risk presented by each identified hazard.

3.2.3 Risk Analysis and Approval

Sites must make sure that Stanwell's Risk Evaluation Matrix GOV-STD-11 is used for assessing all risks and that the risk level is as low as is reasonably practicable.

An acceptable level of risk is one that:

- is reduced to as low as reasonably practicable by implementation of controls;
- is based on an assumption that control measures will be successfully implemented; and

- is reviewed and accepted by those performing the risk assessment.

3.2.4 Escalation and Acceptance of Risks

Persons performing a risk assessment must make sure that approval for work to be undertaken according to the Risk Tolerance Level identified is obtained in accordance with Table 1 below before the work activity can be undertaken.

Table 1 – Risk Approval Escalation

Risk Tolerance Level	Approval Position
Extreme	Work cannot proceed until the level of risk is reduced.
High	Site Manager
Medium	Superintendent
Tolerable	Competent Person i.e. hazard management trained and specific knowledge and experience in work being conducted.

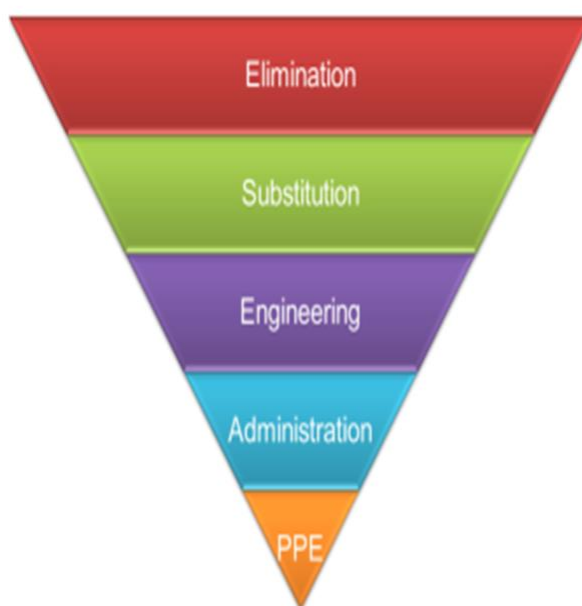
3.3 Control Measures

Sites must make sure:

- risks are eliminated, as far as reasonably practicable;
- where elimination is not reasonably practicable, risks are minimised as far as reasonably practicable; and
- risks are controlled through the application of the hierarchy of control to achieve the highest level of protection that is reasonably practicable in the circumstances.

Controlling the hazard at the source by eliminating the risk is the aim. If the hazard can't be eliminated, then risks must be minimised so far as is reasonably practicable by substitution, engineering, administration or the use of personal protective equipment (PPE).

Figure 1 – The hierarchy of control



Deciding what is 'reasonably practicable' to protect people from harm requires taking into account and weighing up all relevant matters, including:

- the likelihood of the hazard or risk concerned occurring;
- the consequence that might result from the hazard or risk;
- knowledge about the hazard or risk, and ways of eliminating or minimising the risk;
- the availability and suitability of ways to eliminate or minimise the risk; and
- after assessing the extent of the risk and the available ways of eliminating or minimising the risk, the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk.

Control options chosen should be:

- one that provides the highest level of protection for people and is the most reliable – that is, controls located towards the top of the hierarchy in Figure 1.
- available, that is, it can be purchased, made to suit or be put in place; and
- suitable for the circumstance in the workplace – that is, it will work properly given the workplace conditions, work process and workers.

Sites must make sure that controls implemented do not introduce new hazards.

3.4 Monitor and Review Control Measures

Sites should make sure that control measures are reviewed:

- when the control measure is not effective in controlling the risk, for example after an incident;
- before a change at the workplace that may give rise to a new or different health and safety risk i.e. a change to/ or a new, process, chemical, plant and/or equipment;
- if a new hazard or risk is identified;
- if the results of consultation indicate that a review is necessary;
- if a health and safety representative requests a review;
- following a change in legislation or other requirement where applicable;
- following an incident (internal or external) involving the same or similar characteristics or circumstances; or
- if concerns are raised by workers or other relevant stakeholders.

All workers and supervisors are responsible for informally monitoring risk control measures during work activities to make sure:

- chosen control measures reduce risk levels as far as is reasonably practicable;
- chosen control measures have been implemented correctly and as planned;
- the control measures are working effectively; and
- the control measures have not introduced new hazards or complicated existing hazards.

4.0 Review, Consultation and Communication

This Document is required to be reviewed, as a minimum, every 5 year/s

Sites must consult, as far as reasonably practicable, with workers who carry out work, or are likely to be directly affected by a work health and safety matter.

Sites must:

- consult with workers at each step of the hazard management process, by drawing on their experience, knowledge and ideas;
- make sure that workers performing work tasks participate in relevant risk assessments;
- have a process in place to encourage workers to identify and report hazards and risks; and

- allow workers to have access to information relating to hazards (including associated risks) that may affect them. This does not extend to any personal or medical information concerning a worker without the worker's consent.

Refer to Business Procedure: Consultation and Communication OHS-PROC-21 for further information.

5.0 Training and Competency Requirements

Sites must make sure that all workers involved in hazard management and risk assessment activities are trained and competent in accordance with Stanwell's business procedures including Stanwell's Hazard Management training and the use of SafeStarts.

6.0 References

Source	Reference
Legislation	<ul style="list-style-type: none"> • Queensland Work Health and Safety Act 2011, Part 2, s49 • Queensland Work Health and Safety Regulation 2011, Chapter 3 • How to Manage Work Health and Safety Risks Code of Practice 2011 • Queensland Work Health and Safety Consultation, Co-operation and Co-ordination Code of Practice 2011
Australian Standards	<ul style="list-style-type: none"> • Nil
Business Procedures	<ul style="list-style-type: none"> • Consultation and Communication OHS-PROC-21 • Risk Management Framework GOV-PROC-37
Tools	<ul style="list-style-type: none"> • SafeStart booklet • Risk Evaluation Matrix GOV-STD-11 • Stanwell Hazard Management Training HS148

7.0 Definitions

Term	Meaning
Construction Work	Any work carried out in connection with the construction, alteration, conversion, fitting-out, commissioning, renovation, repair, maintenance, refurbishment, demolition, decommissioning or dismantling of a structure.
Hazard	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.
High Energy High Impact (HEHI)	<p>Specific hazards/activities selected by Stanwell, where the consequences of uncontrolled energies can be catastrophic. These specific hazards/activities require the application of the site specific Safe System of Work.</p> <ul style="list-style-type: none"> • Confined Space Entry • Complex Lifting Operations <ul style="list-style-type: none"> ○ Lifting of persons in workbox. ○ Lifting within overhead powerline exclusion zones. ○ Lifting large pressure vessels or tanks. ○ Heavy lifts where the load is 50 tonnes or more. ○ Loss of the load would have a serious impact on production operations.

Term	Meaning
	<ul style="list-style-type: none"> ○ Tilt-up panel lifting tasks. ○ Multiple crane lift. ○ A lift >80% greater than the cranes rated capacity (if using a mobile crane). ○ The coordinator of a lifting operation can choose to deem the lift as complex, as required. ● Hot Work ● Plant Isolation ● Radiation Work ● Electrical Work ● Excavation or Penetration <ul style="list-style-type: none"> ○ >150mm or where damaging energies have been identified. ● Work at height: <ul style="list-style-type: none"> ○ there is a risk of falling more than 2 metres; and ○ there is no compliant fixed edge or fall protection; or ○ a harness is proposed to be used as the primary means of control.
High Risk Construction Activity	<p>Construction work that:</p> <ul style="list-style-type: none"> a) involves a risk of a person falling more than 2m; or b) is carried out on a telecommunication tower; or c) involves demolition of an element of a structure that is load-bearing or otherwise related to the physical integrity of the structure; or d) involves, or is likely to involve, the disturbance of asbestos; or e) involves structural alterations or repairs that require temporary support to prevent collapse; or f) is carried out in or near a confined space; or g) is carried out in or near— <ul style="list-style-type: none"> (i) a shaft or trench with an excavated depth greater than 1.5m; or (ii) a tunnel; or h) involves the use of explosives; or i) is carried out on or near pressurised gas distribution mains or piping; or j) is carried out on or near chemical, fuel or refrigerant lines; or k) is carried out on or near energised electrical installations or services; or l) is carried out in an area that may have a contaminated or flammable atmosphere; or m) involves tilt-up or precast concrete; or n) is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians; or o) is carried out in an area at a workplace in which there is any movement of powered mobile plant; or p) is carried out in an area in which there are artificial extremes of temperature; or q) is carried out in or near water or other liquid that involves a risk of drowning; or r) involves diving work.

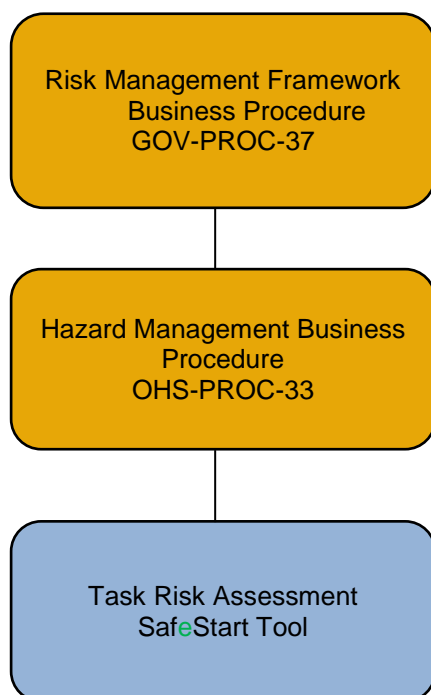
Term	Meaning
So far as is reasonably practicable (As far as reasonably practicable)	<p>That which is, or was at a particular time, reasonably able to be done in relation to ensuring health and safety, taking into account and weighing up all relevant matters including:</p> <ul style="list-style-type: none"> a) the likelihood of the hazard or the risk concerned occurring; and b) the degree of harm that might result from the hazard or the risk; and c) what the person concerned knows, or ought reasonably to know, about— <ul style="list-style-type: none"> (i) the hazard or the risk; and (ii) ways of eliminating or minimising the risk; and d) the availability and suitability of ways to eliminate or minimise the risk; and e) after assessing the extent of the risk and the available ways of eliminating or minimising the risk, the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk.
Risk	The possibility that harm (death, injury or illness) might occur when exposed to a hazard.
Risk Control	Taking action to eliminate health and safety risks so far as is reasonably practicable, and if that is not possible, minimising the risks so far as is reasonably practicable. Eliminating a hazard will also eliminate any risks associated with that hazard.

8.0 Revision History












Rev. No.	Rev. Date	Revision Description	Author	Endorse/Check	Approved By
0	17.10.2016	Consolidation of legacy documents into one Business Procedure	Jan Fullard	Michael Joy	Ian Gilbar

9.0 Appendices

Appendix A: Hazard Management Document Flowchart



Appendix B: Sources of Potentially Damaging Energy

Gravitational (Falls and Falling Objects)		<ul style="list-style-type: none"> • What can fall on me? / What can I fall in to? • What objects fall? • What can I or others slip or trip on?
Electrical		<ul style="list-style-type: none"> • Can I or others come in contact with live electrical parts (overhead power line, welding electrode, induced voltage)? • Am I or others exposed to high fault currents (battery banks, within switchboards), or electro-magnetic fields / static build up? • Is there water ingress into electrical components or mechanical damage to power leads / fixed electrical wiring?
Moving (Kinetic) /Mechanical		<ul style="list-style-type: none"> • What vehicles / mobile plant, sharp objects, plant / parts could move to cut, shear, draw in, entangle? • What items could become projectiles and ejected items (including foreign object in the eye)? • Is there mechanical damage to PPE, services or other items?
Chemical / Substances		<ul style="list-style-type: none"> • What chemicals / substances could I come in contact with or ingest? • What chemicals / substances could come in contact with the environment, air, water, land?
Radiation		<ul style="list-style-type: none"> • What ionising radiation source/s (industrial radiography, non-destructive testing) can I or others be exposed to? • What non-ionising radiation source/s (ultraviolet, laser, welding flash, infrared, microwave, radiofrequency) can I or others be exposed to?
Noise / Vibration		<ul style="list-style-type: none"> • Am I or others (including site neighbours) exposed to increased noise (levels that may cause hearing damage / worker discomfort, amenity issues)? • What vibrating plant / vehicles, vibrating tools / objects can I come in contact with?
Dust / Fumes		<ul style="list-style-type: none"> • What dusts, gases, fumes, vapours or mists that I or others could inhale or get in eyes? • What dusts, gases, fumes, vapours or mist could be an impact on the environment (air, water, land) or site neighbours?
Thermal (Hot/Cold)/ Explosive		<ul style="list-style-type: none"> • What objects will be hot / cold? • Could the environment become excessively hot / cold? (consider heat stress). • What can cause fire / explosion, ignition of gas / dust? • How could extreme heat / cold impact on the environment (air, water, land)?
Pressurised		<ul style="list-style-type: none"> • What stored gas, liquid, solid under pressure could be released? • What spring / tension energy could be released? • What pressurised agent/s could I or others contact?
Muscular (Manual Handling / Posture)		<ul style="list-style-type: none"> • How might the task require me to: <ul style="list-style-type: none"> ○ Handle heavy, unstable or awkward objects / loads? ○ Maintain static work postures? ○ Undertake repetitious movements?
Biological		<ul style="list-style-type: none"> • What algal, bacterial, fungal, viral or parasitic agents could I contact, ingest or inhale? • What animals, insects and spider are in the area that could bite / sting? • How could I sustain a sharps injury / needle-stick exposure? • What algal, bacterial, fungal, viral or parasitic agents could impact on the environment (air, water, land)?