Procedure

Hazard Identification and Risk Management

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Ver No.	Description	Document Owner		Document Approver		
		Position	Approval	Position	Approval	Approval Date
11	Amended Version	Manager Health, Safety & Quality	Refer to supporting Info in Rex	Executive General Manager - People, Culture & Safety	Refer to supporting Info in Rex	13/03/2024

Contents

1. Purpose

The purpose of this Procedure is to establish the systematic process used by Seqwater to identify and manage Health, Safety and Wellbeing (HSW) hazards and risks.

2. Scope

This Procedure applies to all Workers.

Risk management applies to contractors (they may use their own forms and templates to document the risk management process). Seqwater's engaging officer must verify that the contractor's system meets the intent of this Procedure. For further information, refer to the Integrated Contractor Management Procedure (PRO-00808).

3. Risk Management Process

3.1. What is the risk management process?

A safe workplace does not happen by chance.

There are four simple steps of risk management that allow our people to go home safely to their families.

- Step 1 – Identify the hazards – find out what could cause harm.
- Step 2 – Assess risks – how serious the consequence could be and the likelihood of it happening.
- Step 3 – Control the risk – implement the most effective control measure that is reasonably practicable with consideration given to the hierarchy of control to ensure residual is at an acceptable level.
- Step 4 – Review and maintain control Measures – make sure the controls are working as planned.

3.2. When to apply the risk management process?

All Workers must be proactive in identifying hazards and controlling the hazard in accordance with the hierarchy of controls to manage the risk of harm. The list below helps identify when to apply the risk management process:

- if the task has not been done before
- when planning or making a change to a workplace (e.g., purchasing of new plant, substances or services)
- when responding to workplace incidents (even if they have not caused any harm or any damage to property)

- when responding to concerns raised by workers, Health Safety Representatives (HSRs) or others at the workplace
- at regular or scheduled intervals appropriate to the nature of the workplace and the hazards
- before work starts or when creating a work order not covered by an existing procedure, SWMS or work instruction
- for a specific hazard where it is required by WHS Legislation
- when internal or external conditions change (e.g., personnel, workplace or weather changes).

3.3. Step 1 - How do I identify a Hazard?

A hazard can be identified in a variety of ways including:

- observing how tasks are performed
- consulting with Workers who perform the tasks
- reviewing psychological demands of the task
- during scheduled assurance activities
- safety in design workshops (HAZOP, CHAZOP etc.)
- reviewing incident trends
- monitoring information and advice about hazards and *r*isks relevant to the water industry and types of work from regulators, industry associations, unions, technical specialists and safety consultants.

3.3.1. Immediate action

A Worker who identifies a hazard must:

1. notify all others in the vicinity
2. take action, so far as is reasonably practicable and where it is safe to do so, to eliminate the hazard
3. where it is not reasonably practicable to eliminate the hazard, the Worker must take preventative action to prevent injury or damage (e.g. erect barricades); and
4. report the hazard to the Line Supervisor **and** enter in Risk Wizard as soon as possible for further action and implementation of controls.

3.3.2. Communication

The Line Supervisor will provide feedback regarding the elimination of the hazard or implementation of controls to the Worker who reported the hazard.

3.4. Step 2 - How do I assess the risk?

To undertake a risk assessment the following actions are to be undertaken:

- identify the **hazard**
- identify the **risks**; and
- identify the **controls**.

This methodology supports the risk assessment process and approvals documented in the Enterprise Risk Management Framework (FRA-00014).

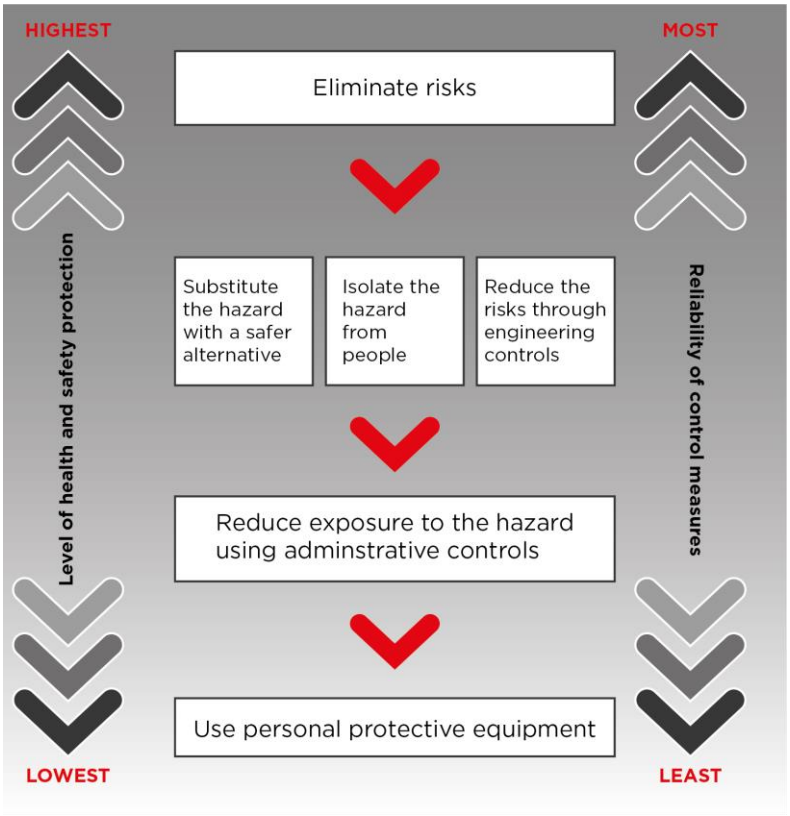
3.5. Step 3 - How do I control the risks?

1. Identify the controls in the following specific order (hierarchy of control). Can the hazard be removed? Can I eliminate it?

If it is not reasonably practicable to eliminate the hazard then apply the hierarchy of controls.

2. Can I change what I am doing? Can I substitute (wholly or partly) the hazard with something that gives rise to a lesser risk?
3. Can I isolate the hazard? Can I remove people from the hazard?
4. Can I implement engineering controls?

If a risk remains, then minimise the remaining risk by implementing administrative controls e.g. signage and/or providing use of suitable Personal Protective Equipment (**PPE**).



Further information on PPE is available in the PPE Procedure (PRO-00881).

When selecting control measures, Workers should also consider whether:

- there are any Critical Controls that need to be implemented
- they effectively control the risk
- new hazards have been introduced
- Workers can do their work without undue discomfort or distress
- they are proportionate to the degree and nature of the risk and comply with Seqwater procedures, the WHS Legislation and other relevant requirements.

A combination of controls should be used when a single control measure is not sufficient to eliminate or effectively manage the risk.

3.6. Step 4 - Implement controls

The following steps should be undertaken to ensure effective implementation of controls:

1. actions shall be allocated to a person with responsibilities assigned and agreed on for implementation.
2. where required, actions shall be recorded in the action management system (i.e. Risk Wizard) and actions shall be monitored and tracked for completion.
3. monitoring activities are carried out to verify implementation and effectiveness of controls.

4. Line Supervisor must provide adequate communication, consultation, training and supervision to Workers regarding implementation of controls.

3.7. Step 4 - How do I make sure controls are effective?

Reviewing the risk assessment and the controls on a regular basis make sure that the controls are relevant, still in place, implemented and effective. Reviews must occur when:

- control measures are no longer effective in controlling the risk
- notifiable incident occurs
- a change at the workplace that is likely to give rise to a new or different health and safety risk that the control measure may not effectively control
- new hazard or risk is identified
- results of consultation indicate that a review is necessary; and/or
- a HSR requests a review.

3.8. Critical Risk Management

For any risks identified and assessed as having the potential to cause a fatality a Critical Risk Management process will be applied to assessing the risk and identifying the controls. This includes the use of bow-tie analysis to identify any Critical Controls associated with the risk (i.e. controls that are critical to preventing a fatality). This process is designed to provide additional focus to ensure any controls that will prevent a fatality are identified, implemented, and are working as designed.

The implementation of these controls are the minimum mandatory requirements that must be in place and demonstrated as working effectively to manage the critical risk. Where a Critical Control cannot be implemented as designed the task must be stopped and risk assessed. Where an alternative control needs to be implemented the Health, Safety and Wellbeing Management System Deviation Approval Form (FRM-00795) must be completed.

Further information is available in Seqwater's Critical Risk Management Procedure (PRO-02613). Seqwater's assessment of their critical risks is available in the Critical Risk Bow Tie and Performance Standards Risk Assessment (RSK-00470).

4. Risk Management Tools

4.1. Risk/Hazard Registers – What are they?

Identified risks and hazards are documented in registers. The business uses the below;

Register	Review frequency*	Information	Responsibility
Enterprise Risk Register	Quarterly	Seqwater will monitor and record specific enterprise level HSW causes and risks.	EGM, People Culture & Safety
HSW Risk and Opportunities Register (REG-00348)	Annually	Includes known HSW risks and opportunities, their risk rating and current controls.	Manager, HS&Q
WHS Site Hazard Register Template (TEM-00023)	Annually	Developed for a specific site or a group of sites (e.g. recreational areas within a catchment) to identify static hazards present on site. Task based hazards will be managed using the tools detailed in section 4.	Site Owner
Project Management risk register	As required	Risk register is maintained for each project in Planisware, which include all relevant WHS Risks.	Project Manager

*Seqwater will also review the registers if:

- assurance activities identify that control measure are insufficient or ceases to be effective in controlling the risk
- following a notifiable incident, incident investigation where a failure in the effectiveness of a control is identified
- before a change to a workplace where a new hazard or risk applicable to Seqwater sites is identified
- if the results of consultation indicate that a review is necessary and/or
- if a HSR requests a review.

4.2. HSW Risk Assessment - General

The HSW Risk Assessment Form (TEM-00008) is to be used to document the outcome of a HSW risk assessment.

The following are examples of when a HSW risk assessment may be used:

- planning a community event
- determining the safest option to deliver an outcome
- assessing all hazards associated with a particular role/task; and/or
- any other HSW risk assessment not supported by a form specified in a HSW operational control procedure.

4.3. Specific Risk Assessments

Specific risk assessments and risk registers are carried outline accordance with the WHS Legislation and other relevant requirements. Specific registers are required for, but not limited to:

- Confined spaces – refer to PRO-00443;

- Asbestos / Hazardous chemicals – refer to PRO-00008;
- Hazardous manual tasks -– refer to PRO-00804;
- Noise – refer to PRO-00304;
- Safe Work with Plant – refer to PRO-00867

4.4. Task Based Risk Management Tools

Prior to undertaking a work activity at a Seqwater workplace a risk assessment must be completed. All risk and controls must be identified and may be completed using the following tools;

- Take 5 (GDE-00317)
- Safe Work Method Statement (SWMS) Template (TEM-00013)

4.4.1. Take 5

A Take 5 is used to assess dynamic risks or changes to the work environment associated with a task. A Take 5 does not need to be documented.

A Take 5 is used to identify and mitigate any hazards associated with a task. It must be used:

- before commencing any new task to identify hazards and assess whether they can be controlled easily, or if they require a documented risk assessment
- when something changes in your working environment
- following a recess break
- when there is a significant break in undertaking the task; or
- when the conditions change during a task.

4.4.2. Safe Work Method Statement (SWMS)

A SWMS is used to identify the steps associated with undertaking a task. A SWMS identifies the associated hazards, risks and controls for each step of the task.

A SWMS must be used for any tasks:

- that involve High Risk Construction Work
- that involve an isolation or permit
- that has risks that cannot be controlled by a Take 5.

When developing a SWMS, you/your work team must:

- review relevant WHS Site Hazard Register and any other risk assessments
- identify if there are any critical risks associated with the task and incorporate the applicable Critical Controls
- consult with Workers who will be undertaking the task.

After a SWMS has been drafted, the accountable person for ensuring implementation, monitoring and effectiveness of the SWMS will need to review and sign the SWMS. Before a task can commence all Workers completing the tasks will need to read and sign that they understand and will comply with the SWMS.

Where the requirement for a SWMS is not clear, Workers should escalate the issue to their Line Supervisor. Additional advice and support can be obtained from functional supports e.g., HSW, Environment, Drinking Water Quality, and Quality.

Changes in conditions should be monitored via a Take 5 and any SWMS amended if required. If amendments are made, Workers will need to read and sign that they understand and will comply with the amended SWMS.

The below table details the generic drafted SWMS for use:

Risks	Link	Risk	Link
Confined Space	RSK-00471	Cranes and lifting	RSK-00472
Electrical - HV	RSK-00473	Electrical - LV	RSK-00474
Electrical – LV Energised Fault Finding	RSK-00479	Excavation	RSK-00475
Hazardous Energy	RSK-00476	Mobile Plant	RSK-00477
Working at Heights	RSK-00478	Working on, in or near Water	RSK-00480
Combined Generic SWMS	RSK-00481		

The SWMS template has been designed to meet the WHS legal requirements for high-risk construction work. For more information for construction work refer to WHS, Environment and Heritage Construction Management Procedure (PRO-00005).

Once a SWMS has been used it must be either kept in hard copy, saved into REX or scanned and saved into CIS to comply with Seqwater's record keeping requirements.

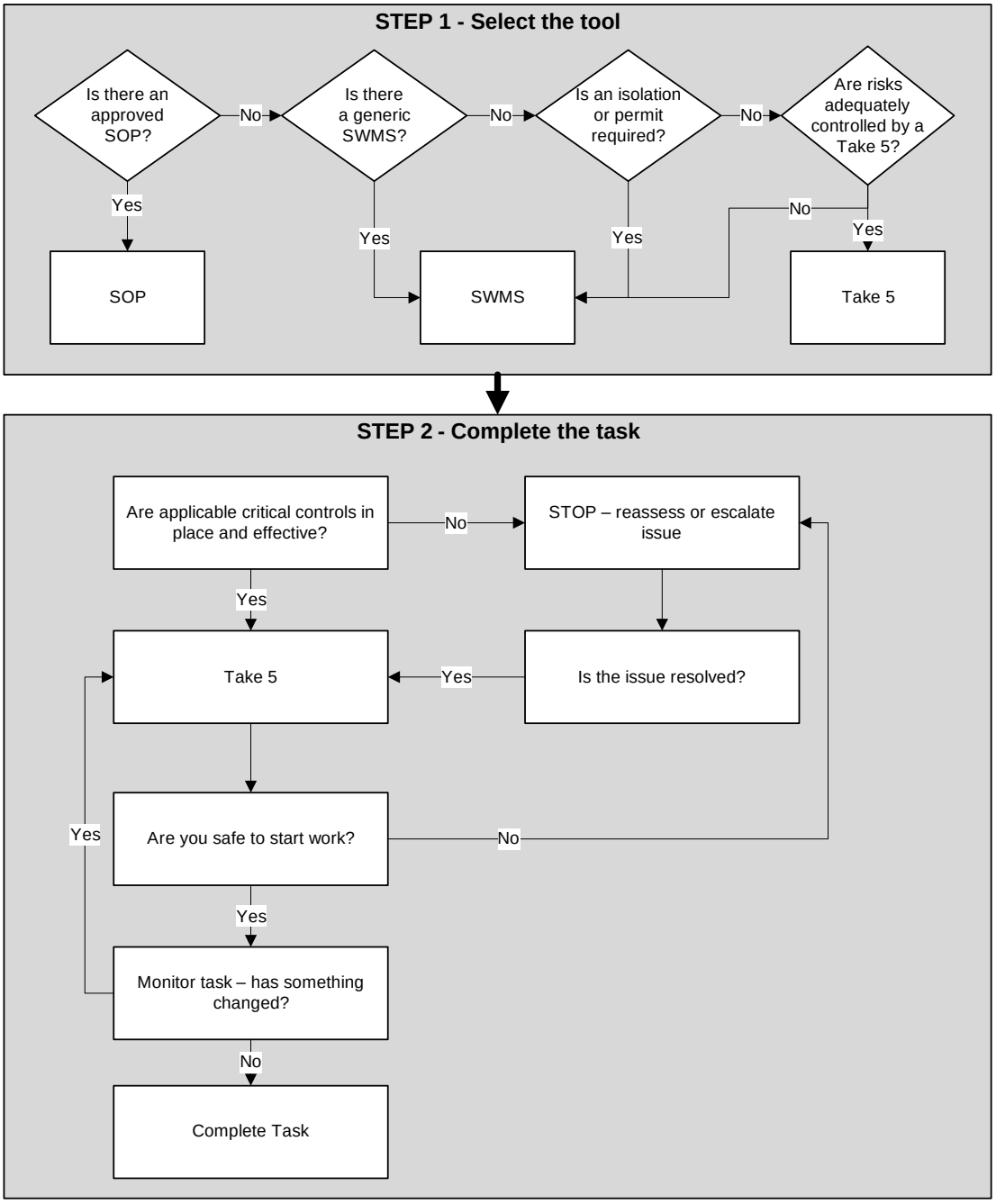
4.5. Standard Operating Procedure (SOPs)

Standard Operating Procedures (SOPs) are developed for routine operational identified tasks at Seqwater. SOPs assist Workers to carry out routine tasks in a safe, consistent, and reliable way. The objective for a SOP is to create a consistent approach to performing a task and controlling associated risks across HSW, Environment, Drinking Water Quality and Process/Supply, while improving operational efficiencies.

A SOP can be developed where a Critical Control exists so long as the task does not involve High-Risk Construction Work.

Refer to Standard Operating Procedure (SOP) Development Guideline (GDE-00322) for further information.

4.6. How do I know what task-based risk management tool to use?



5. Definitions

Term	Definitions
Critical Control	Control that is crucial to preventing or mitigating the consequence of the unwanted event. The absence or failure of a Critical Control would significantly increase the risk of the Material Unwanted event (MUE) occurring.
Critical Risk	A Risk that has been identified and assessed as having the potential to cause a fatality.
Critical Risk Management	The process of improving awareness and managerial control over Critical Risks and material unwanted events for the purpose of ensuring controls are in place to reduce risk levels.
Control	A control is any measure or action that modifies Risk. Controls must be specifiable, measurable, and auditable.
Effective control	An effective control is a control that is: • fit for purpose. • suitable for the nature and duration of the work; and • installed, set up and used correctly.
Hazard	A hazard is a potential source of harm or adverse health effect on a person or persons including situations that impact on environment and property.
Health Safety Representative (HSR)	A Worker elected by members of a work group to represent that work group on HSW matters.
Hierarchy of Control	A tool used to identify the controls for a risk, the hierarchy of control risks are ranked from the highest level of protection and reliability to the lowest.
High Risk Construction Work	As defined in section 291 of the *Work Health and Safety Regulation 2011* (Qld) high-risk construction work means construction work that involves any of the following: • involves a risk of a person falling more than 2m. • is carried out on a telecommunication tower. • involves demolition of an element of a structure that is load-bearing or otherwise related to the physical integrity of the structure. • involves, or is likely to involve, the disturbance of asbestos. • involves structural alterations or repairs that require temporary support to prevent collapse. • is carried out in or near a confined space. • is carried out in or near a shaft or trench with an excavated depth greater than 1.5m or a tunnel. • involves the use of explosives. • is carried out on or near pressurised gas distribution mains or piping.

Term	Definitions
	• is carried out on or near chemical, fuel or refrigerant lines. • is carried out on or near energised electrical installations or services. • is carried out in an area that may have a contaminated or flammable atmosphere. • involves tilt-up or precast concrete. • 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. • is carried out in an area at a Workplace in which there is any movement of powered mobile plant. • is carried out in an area in which there are artificial extremes of temperature. • is carried out in or near water or other liquid that involves a risk of drowning. • involves diving work.
Line Supervisor	A line supervisor is a person with day-to-day supervisory responsibilities for Workers within a functional area of the business. A line supervisor includes, but is not limited to, Team Leaders, Coordinators and Level 4 or 5 Supervisors. A line supervisor is also considered a Worker, but has additional responsibilities for the implementation of the HSW Management System as identified in the HSW Management System and/or position description.
Preventative Action	Any action designed to eliminate the cause of a potential non-conformity or other undesirable potential situation.
Reasonably practicable	Has the same meaning given under the *Work, Health and Safety Act 2011 (Qld)*. The following matters must be considered to determine what is reasonably practicable on a case-by-case assessment: • the likelihood of the hazard or the risk concerned occurring. • the degree of harm that might result from the hazard or the risk. • what the person concerned knows, or ought reasonably to know, 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. • 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	Risk is the effect of uncertainty on our objectives which could cause injury or harm.
Site Owner	The Seqwater employee holding a position that has overall accountability and responsibility for the day-to-day operation and maintenance of a particular Seqwater site.

Term	Definitions
Safe Work Method Statement (SWMS)	A document that identifies the associated hazards, risks and controls for each step associated with undertaking a task. A SWMS must be used for any activities that involve High Risk Construction Work.
Workers	Includes all permanent, temporary, and casual employees of Seqwater, and: • vocational and work experience placements • volunteers • contractors and consultants employed by another entity but temporarily assigned to do work for or on behalf of Seqwater.

6. Roles and Responsibilities

Role	Responsibility
Contractors	• Ensure their management system meets the intent of this system Procedure. • Has a documented, implemented and monitoring process for risk management.
ELT	• Monitor the overall effectiveness of the risk management process.
HSW Team	• Provide HSW system documentation to support systematic identification of hazards and risk management, including supporting managers with the development and maintenance of hazard/risk registers. • Facilitate the identification of Material Unwanted Events, development of bowtie risk assessments and identification of associated Critical Controls in conjunction with relevant subject matter experts. • Provide advice, support, and training regarding the identification of hazards, risk assessment and implementation and effectiveness of controls including critical controls. • Provide a system and process to support recording of Hazard and risk assessments. • Report trends and analysis of hazard identification and effectiveness of controls to relevant stakeholders. • Complete workplace monitoring activities to verify the implementation of the hazard identification and risk management process; and • Provide support on the implementation and application of this Procedure.
Line Supervisor	• Communicate, consult, and provide instruction, training and supervision to Workers regarding hazard identification and HSW risk management at the relevant operational or project site. • Undertake risk assessments in accordance with this Procedure. • Complete workplace monitoring activities to verify the implementation of the hazard identification and risk management process.

Role	Responsibility
Managers	• Establish processes to identify reasonably foreseeable hazards that could give rise to risks to HSW in their area of responsibility. • Communicate, consult and provide instruction, training and supervision to workers regarding hazard identification and HSW risk management. • Implement effective control measures for Hazards and Risks identified in their area of responsibility. • Undertake risk assessments in accordance with this procedure. • Regularly monitor and review of the effectiveness of controls, including undertaking critical control checks to verify critical controls are implemented and working as designed. • Implement corrective actions and treatment plans to improve control effectiveness where required in their area of responsibility in collaboration with workers and the HSW team; and • Encourage workers stop work if there is an imminent risk to workers' safety, until that risk is adequately resolved.
Site Owners	• Ensure a current WHS Site Hazard and other risk registers are maintained for any sites in their area of responsibility.
Workers	• Proactively identify, assess and report hazards and risks. • Undertake risk assessments (e.g. Take 5, SWMS) and implement control measures in accordance with this Procedure; and • Implement Seqwater's Critical Controls in all aspects of their work. • Stop work in situations that may cause harm. These situations must be immediately reported to the worker's Line Supervisor.

7. Training and Competency

The following training is mandatory training for all Seqwater employees and recorded in the Learning Management System:

- Critical Control and Risk Management Tools Training.

8. References and Related Materials

8.1. Legal and Other Requirements

Description
Work Health and Safety Act 2011 (Qld) *and Work Health and Safety Regulation 2011* (Qld)
How to Manage Work Health and Safety Risks Code of Practice 2011 (Qld)

8.2. Seqwater supporting system documents

Description	Location
FRA-000014 Enterprise Risk Management Framework	REX & Waternet
FRM-00795 HSW - Health, Safety and Wellbeing Management System Deviation Approval Form	REX & Waternet
GDE-00317 Take 5	REX & Waternet
GDE-00322 SOP Development Guideline	REX & Waternet
PRO-00005 WHS, Environment and Heritage Construction Management Procedure	REX & Waternet
PRO-00008 Hazardous Chemicals Procedure	REX & Waternet
PRO-00304 Noise Management Procedure	REX & Waternet
PRO-00443 Confined Space Management Procedure	REX & Waternet
PRO-00804 Hazardous Manual Tasks Procedure	REX & Waternet
PRO-00808 Integrated Contractor Management Procedure	REX & Waternet
PRO-00867 Safe Work with Plant Procedure	REX & Waternet
PRO-00870 HSW Consultation, Communication and Issue Resolution Procedure	REX & Waternet
PRO-00881 Personal Protective Equipment (PPE) Procedure	REX & Waternet
PRO-02613 Critical Risk Management Procedure	REX & Waternet
REG-00348 WHS Corporate Risk and Opportunities Register	REX & Waternet
RSK-00470 Critical Risk Bow Tie and Performance Standards Risk Assessment	REX & Waternet
TEM-00008 HSW – Risk Assessment Template	REX & Waternet
TEM-00013 SWMS Template	REX & Waternet
TEM-00023 WHS Site Hazard Register Template	REX & Waternet
TEM-00329 SOP Template	REX & Waternet
Generic SWMS	
RSK-00471 Confined Space	REX & Waternet
RSK-00472 Cranes and Lifting	REX & Waternet

Description	Location
RSK-00473 Electricity – HV	REX & Waternet
RSK-00474 Electricity – LV	REX & Waternet
RSK-00475 Excavation	REX & Waternet
RSK-00476 Hazardous Energy	REX & Waternet
RSK-00477 Mobile Plant	REX & Waternet
RSK-00478 Working at Heights	REX & Waternet
RSK-00479 Electricity – LV Fault Finding	REX & Waternet
RSK-00480 Working on, in or near Water	REX & Waternet
RSK-00481 Combined Generic SWMS	REX & Waternet