Procedure

Work Health and Safety
Hazard Identification and Risk Management

Document number: PRO-00657

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<th>Rev no.</th>
<th>Description</th>
<th>Process Owner</th>
<th>Approved for issue</th>
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<td>APPROVED</td>
<td>Manager, WHS</td>
<td>Joe Meissner</td>
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<td></td>
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<td>CEO</td>
<td>Peter Dennis</td>
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1. **Purpose**

Seqwater is committed to the health and safety of all people at the workplace. The purpose of this procedure is to document a systematic process to manage Work Health and Safety (WHS) hazards and risks at Seqwater.

This procedure supports the requirements described in Element 3 – Hazard identification and risk management of Seqwater's WHS Management System Framework.

This procedure adopts and is consistent with the requirements outlined in:

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

In addition, this procedure aligns to the requirements outlined in the Seqwater Enterprise Risk Management Framework (PLN-00294).

2. **Scope**

This procedure applies to all Seqwater workers, business groups and work activities.

3. **Roles and responsibilities**

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<tr>
<th>Role</th>
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| Managers     | • Establish processes to ensure all reasonably foreseeable hazards that could give rise to risks to health and safety are identified in their area of responsibility.  
• Communicate, consult and provide instruction, training and supervision to workers regarding hazard identification and WHS risk management.  
• Ensure identified hazards in the work environment are reported to the WHS Team.  
• Implement effective control measures for hazards and risks identified in their area of responsibility.  
• Undertake risk assessments in accordance with this procedure.  
• Ensure a current WHS risk register is maintained for the site, location, project or activity undertaken in their area of responsibility.  
• Regularly monitor and review the effectiveness of controls and implement corrective actions and treatment plans where required in their area of responsibility.  
• Ensure workers stop work if there is an imminent risk to workers safety, until that risk is adequately resolved. |
4. **Procedure**

4.1 **WHS risk management process overview**

There are 5 steps in the WHS risk management process as outlined below.

- **STEP 1 – Hazard identification**
  Find out what could cause harm.

- **STEP 2 – Risk assessment: inherent risk**
  Identify the **consequence**, identify the **likelihood** and rate the inherent risk using the Seqwater WHS Risk Matrix.

- **STEP 3 – Control risks**
  Implement the most effective control measure in accordance with the hierarchy of controls that is reasonably practicable in the circumstances.

- **STEP 4 – Risk assessment with control measures: residual risk**
  Re-apply the WHS Risk Matrix to re-assess the risk for each task with the identified control measures implemented. The new risk rating obtained is the
residual risk for the hazard. This determines the level of authorisation required in accordance with the **WHS Risk Action Table** (section 5.4) for work to proceed.

- **STEP 5 – Monitor and review control measures**
  Verify control measures are working as planned, reassess residual risk rating and develop a treatment plan for corrective action where required.

The WHS Risk Assessment Guide (GDE-00044 – Appendix B) and the JSEA/SWMS Process Flow Chart (Appendix C) provide a summary of this process.

### 4.1.1 When to use the risk management process

WHS risk management is an ongoing process. Risk assessments or reviews must be undertaken at various times including:

- 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 caused no injury)
- when responding to concerns raised by workers, Health and Safety Representatives (HSR) or others at the workplace
- at regular or scheduled intervals appropriate to the nature of the workplace and the hazards present. Refer to WHS Inspections Procedure (PRO-00013)
- when legislative obligations change
- before work starts or when creating a work order not covered by an existing procedure, JSEA/SWMS or work instruction
- a risk assessment for a specific hazard is required by WHS legislation (see section 6.3)
- when internal or external conditions change e.g. personnel or weather changes.

A range of WHS Operational Control Procedures are also available that provide additional guidance on applying the WHS risk management process to a range of specific hazards and high-risk activities. See the WHS Operational Control Procedure Register (REG-00567) for details of all current WHS Operational Control Procedures.

### 5. WHS risk management process

All workers must be proactive in identifying hazards, assessing them in line with the WHS Risk Assessment Guide (GDE-00044 – Appendix B) and controlling the hazard in accordance with the Hierarchy of Controls (see section 5.3.1) to manage the risk of harm.
5.1 Step 1 – Hazard identification

5.1.1 Hazard identification, notification and response

**Immediate action**
A worker who identifies a hazard must:

- notify others in the vicinity
- take action to eliminate the hazard immediately – so far as is reasonably practicable and where it is safe to do so
- if it is not reasonably practicable to eliminate the hazard, take action to prevent injury or damage (e.g. erect barricades)
- report the hazard to an immediate line supervisor as soon as possible for further action and implementation of controls
- report the hazard to the Seqwater Incident Hotline on (07) 3270 4040.

**Recording and reporting**
Upon receipt of a hazard report, the line supervisor must ensure the hazard is managed.

Upon the receipt of a hazard report, the Incident and Security Team shall complete an assessment of the situation in accordance with the Bulk Authority Emergency Response Plan (ERP-00001). If the situation is assessed as a Level 1 event then the report will be recorded in the incident & emergency management system and managed and communicated in accordance with the requirements of this plan.

If the assessment of the hazard report does not meet the Level 1 (or a higher level) event definition then the report shall be communicated to the on-call WHS Team member.

Upon receipt of a hazard report from the Incident and Security Team, the WHS Team will enter the hazard into the online database according to hazard type. Hazard type categories are listed in Appendix A. Actions will be allocated to a person responsible for implementation as required.

**Communication**
The line supervisor will provide feedback regarding the implementation of controls to the person reporting the hazard.

The Manager, WHS will ensure hazard notifications are collated, analysed and reported to the business in accordance with the WHS Reporting Procedure (PRO-01605) and WHS Communication, Consultation and Issue Resolution Procedure (PRO-00870).

5.1.2 WHS inspections

**WHS workplace inspections**
WHS workplace inspections are to be conducted at scheduled intervals to identify reasonably foreseeable hazards in the work environment. The Regional WHS Advisors will complete these inspections in accordance with the WHS Inspections Procedure (PRO-00013).
WHS project site inspections

A site inspection and task analysis must be carried out during initial project planning phases in accordance with the WHS Contractor Management Procedure (PRO-00808).

5.2 Step 2 – Risk assessment: inherent risk

5.2.1 Methodology

WHS risk assessments will be undertaken using the risk assessment methodology and risk matrix described in Seqwater’s Enterprise Risk Management Framework (PLN-00294) and further defined in WHS Risk Assessment Guide (GDE-00044 – Appendix B).

The following actions are to be undertaken to complete a WHS risk assessment in accordance with the process and definitions in the WHS Risk Assessment Guide (GDE-00044 - Appendix B):

- Identify the consequence
- Identify the likelihood
- Rate the inherent risk

5.3 Step 3 – Control risks

5.3.1 Select controls - hierarchy of controls

Identify the risk controls and responsibilities by identifying controls in the following specific order:

- Eliminate the hazard.

If elimination of the hazard is not reasonably practicable, minimise the risk so far as reasonably practicable by:

- Substituting (wholly or partly) the hazard giving rise to the risk with something that gives rise to a lesser risk
- Isolating the hazard from any person exposed to it
- Implementing engineering controls.

If a risk then remains, then minimise the remaining risk, so far as is reasonably practicable, by implementing administrative controls.

If a risk then remains, then minimise the remaining risk, so far as is reasonably practicable, by ensuring the provision and use of suitable Personal Protective Equipment (PPE). Further information on PPE is available in the WHS PPE Procedure (PRO-00881).

5.3.2 Select controls – other considerations

Selected control measures should:

- Effectively control the risk
• not introduce a new hazard
• allow workers to do their work without undue discomfort or distress
• be proportionate to the degree and nature of the risk and comply with relevant legal and other requirements.

A combination of risk controls should be used when application of a single risk control measure is not sufficient to eliminate or minimise the risk to health and safety. The WHS operational control procedures provide information on required risk controls for specific hazards and activities.

5.3.3 Implement risk controls

The following steps should be undertaken to ensure effective implementation of controls:
• each control must be allocated to a person with responsibility and timeframes assigned and agreed for implementation
• where necessary implementation of controls must utilise existing capital works and maintenance processes
• safe work procedures, JSEA/SWMS or safe work instructions should be reviewed or developed if not already in place
• line supervisors must provide adequate communication, consultation, training and supervision to workers regarding implementation of controls
• line supervisors must carry out monitoring activities to verify implementation of controls.

5.4 Step 4 – Risk assessment with control measures: residual risk

Re-apply the WHS Risk Matrix to re-assess the risk for each task with the identified control measures implemented. The new risk rating obtained is the residual risk rating for the work. This determines the level of authorisation required in accordance with the following table for work to proceed.

<table>
<thead>
<tr>
<th>Residual risk rating</th>
<th>Approval required</th>
<th>Action required by risk owner</th>
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</table>
| Extreme              | CEO and Board     | • Intolerable risk. Activity must not be undertaken. The risk must be reported to the CEO and Board in accordance with the WHS Reporting Procedure (PRO-01605).  
                       |                   | • Notify WHS Team via safety@seqwater.com.au |
| High                 | General Manager   | • Intolerable risk. Activity must not be undertaken prior to General Manager approval.  
                       |                   | • Approver/s must ensure the risk has been eliminated so far as is reasonably practicable or minimised in accordance with the hierarchy of controls so far as is possible. |

The controlled version of this document is registered. All other versions are uncontrolled.
Residual risk rating | Approval required | Action required by risk owner
--- | --- | ---
|  |  | reasonably practicable.
|  |  | Notify WHS team via safety@seqwater.com.au

Medium | Line Supervisor | The following process must be applied:
1. Consult site WHS risk register and ensure identified controls are effectively implemented.
2. Confirm activity, risk assessment and controls with the immediate line supervisor.
3. Seek advice from the Regional WHS Advisor and implement any additional identified controls.
|  |  | The line supervisor must confirm controls, assess and approve or reject the activity.

Low | Workers or persons in charge of the task or activity | Carry out activity following review and implementation of effective risk controls in accordance with the hierarchy of controls.
|  |  | Monitor risk controls to ensure that they are maintained at their present level or at a lower level of risk that current day-to-day work practices can effectively manage.
|  |  | Ongoing monitoring and management required by workers and line supervisors using routine procedures.

5.5 Step 5 – Monitor and review control measures
Risk assessments must include a schedule for regular review of control effectiveness. Review of the effectiveness of control measures identified in the risk assessment is mandatory:
- when the control measure is insufficient or ceases to be effective in controlling the risk
- when a notifiable incident occurs
- before 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
- 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 (HSR) requests a review.
Where required, risk registers must be updated with any changes identified as a result of a review process.
6. WHS hazard identification and risk management tools

6.1 WHS risk assessment

A WHS risk assessment is a structured process to:

- identify the hazards and assess the risks associated with an area, activity, plant or product
- identify controls for the hazards
- re-assess the hazards after the identification of the appropriate controls
- approve the controls
- schedule actions to implement controls and review dates.

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

The following are examples of when a WHS risk assessment should be used:

- Planning a community event.
- Determining the safest option to deliver an outcome.
- Assessing all hazards associated with a particular role.
- Any other WHS risk assessment not supported by a form specified in a WHS operational control procedure.

6.2 Task based risk assessments

Prior to undertaking a work activity (other than administrative activities) at a Seqwater workplace a task based risk assessment must be completed. This risk assessment may be documented on either a RTHA or JSEA/SWMS (TEM-00013) depending on the level of risk involved.

The following flowchart demonstrates which tool is to be used to document a task based risk assessment:
Once a task has commenced, the JSEA/SWMS or RTHA must be reviewed if:

- there is a significant break in undertaking the task
- the conditions change
- in circumstances outlined in section 5.5.
6.2.1 Real Time Hazard Assessment (RTHA)

A Real Time Hazard Assessment (RTHA) is used to undertake a brief assessment of a task or situation to ensure all hazards have been identified and controlled prior to the task proceeding. It may be completed as an individual or team hazard assessment prior to undertaking a work activity with a low risk rating and does not have another risk assessment already completed (e.g. JSEA/SWMS). If the completion of the RTHA identifies a task that doesn’t have a low risk rating a JSEA/SWMS must be completed, instead of a RTHA, prior to commencing the task.

Once a RTHA has been completed it should remain in the RTHA booklet and be available for inspection if requested.

The following are examples of when a RTHA should be used:

- undertaking a workplace inspection that only involves observations and does not involve any medium or high-risk activity such as entering a confined space
- if you are unsure whether an activity requires a JSEA/SWMS.

6.2.2 Job Safety and Environment Analysis (JSEA) / Safe Work Method Statement (SWMS)

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

When developing a JSEA/SWMS the relevant risk register must be consulted to identify any applicable risk controls that need to be implemented. In addition, any workers undertaking the task must be consulted during the development of the JSEA/SWMS.

After a JSEA/SWMS has been drafted, approval must be obtained in accordance with the delegations identified in section 5.4. If the JSEA/SWMS has been developed for high-risk construction work, the JSEA/SWMS must be completed and implemented in accordance with the WHS General Construction Procedure (PRO-00005).

Once approvals have been obtained, the relevant JSEA/SMWS must be reviewed on-site by all workers involved in the activity prior to its commencement. If any conditions have changed since the development of the JSEA/SWMS, amendments to the JSEA/SWMS must be made. Once all workers are satisfied with the contents of the JSEA/SWMS, each person signs onto the JSEA/SWMS confirming they understand the contents of the document and agree to abide by the documented risk controls.

Where a JSEA/SWMS is reviewed immediately prior to undertaking a task a RTHA is not required.

If a notifiable incident occurs during high-risk construction, the JSEA/SWMS must be kept for at least two years. If construction work has ceased within that period the record must be kept readily available for inspection.

Refer to Appendix C for a summary of the JSEA/SWMS process.

Examples of when a JSEA/SWMS should be used include:

- maintenance or repair work at a water treatment plant, dam or catchment
6.3 Specific WHS risk assessments

Specific risk assessments are undertaken in accordance with the requirements of the Work Health and Safety Act 2011 (Qld), Work Health and Safety Regulation 2011 (Qld) and relevant Codes of Practice. Refer to the WHS Operational Control Procedure (PRO-01575) for an overview of the specific risks and risk assessment tools identified for Seqwater’s operational activities. Specific risk assessments are required for, but not limited to:

- confined spaces
- hazardous chemicals
- hazardous manual tasks
- noise
- remote and isolated work
- plant.

6.4 WHS risk registers

6.4.1 Seqwater workplaces, operational sites and specific activities

A risk register must be developed and maintained for all workplaces and areas of Seqwater operations, along with specific activities, using the WHS Risk Register Template (TEM-00023).

All WHS risk registers are available via the WHS - Site Risk Registers TRIM Master Folder (MF13/3013).

Workers should email safety@seqwater.com.au to request an amendment to an existing WHS risk register.

6.4.2 Project risk registers

The project manager must ensure a hazard identification process is followed and a risk register maintained for WHS risks using the WHS Risk Register Template (TEM-00023). For simple projects with a single task, the project manager maintains a register of WHS hazards and risks using the JSEA/SWMS Template (TEM-00013). WHS risks may be separated into a WHS project risk register or incorporated into an integrated project risk register where one exists.
Contractors may maintain their own risk register utilising their own templates where verification of their WHS management system and documentation has been approved by the relevant procurement, contract or project manager.

6.4.3 WHS corporate risk register

The Manager, WHS will ensure a corporate WHS risk register is maintained and available to workers. The corporate WHS risk register will be developed with consideration of operational and site risk registers, incident and hazard data and any other identified hazards and risks.

6.5 Contractors

A contractor may use their own forms and templates to document the WHS risk management process where verification of their WHS management system and documentation has been approved by the relevant procurement, contract or project manager. The WHS Project Compliance Coordinator will provide advice to the contractor or project manager as required.

Where a potential contractor’s system is deemed to be a lower standard than Seqwater’s standards, then the Seqwater employee or representative engaging the contractor must provide direction in the use of this procedure and supporting tools. Refer to the WHS Contractor Management Procedure (PRO-00808) for further information.

7. Training requirements

The following training materials will be made available to relevant workers:

- RTHA and JSEA/SWMS Online Training Module
- WHS Hazard Identification and Risk Management Awareness training.

Training will be provided in accordance with the WHS Training, Competency & Behaviour Management Procedure (PRO-01574).

WHS training requirements will be recorded for identified roles in the WHS Training Needs Analysis.

8. Monitoring and audit

Site inspections will be undertaken at regular intervals to identify hazards and verify implementation of risk controls in accordance with the WHS Inspections Procedure (PRO-00013).

The application of this procedure shall be audited in accordance with the WHS Internal Audit Schedule and the Internal Audit Procedure (PRO-00002).

Audit findings and hazard trending analysis will be reviewed at the Regional WHS Improvement Committees (RWHSCIC) and the WHS Steering Committee (WHSCC) and presented for Management Review to the Executive Leadership Team and the Seqwater Board in accordance with the WHS Reporting Procedure (PRO-01605).
9. Record keeping

All records are to be retained, archived and disposed of in accordance with the Queensland State Archives General Retention and Disposal Schedule for Administrative Records. Additional guidance regarding mandatory record keeping requirements is provided in the WHS Record Keeping Matrix.

10. References

10.1 Legislation and other requirements

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10.2 Supporting procedures

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<td>Q-Pulse</td>
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<td>PRO-00002 – Integrated Management System Internal Audit Procedure</td>
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<td>PRO-00870 – WHS Communication, Consultation and Issue Resolution Procedure</td>
<td>Active</td>
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</tr>
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<td>PRO-00808 – WHS Contractor Management Procedure</td>
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<td>TRIM Ref: D13/61650</td>
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<td>PRO-00013 – WHS Inspections Procedure</td>
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<td>MAN-00211 – WHS Management System Framework</td>
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<td>TRIM Ref: D13/43216</td>
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<tr>
<td>PRO-01575 – WHS Operational Control Procedure</td>
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<td>TRIM Ref: D13/61646</td>
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<td>PRO-00881 – WHS Personal Protective Equipment Procedure</td>
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<td>TRIM Ref: D14/91943</td>
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<td>PRO-01605 – WHS Reporting Procedure</td>
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10.3 Supporting documents, forms and templates

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<td>Real Time Hazard Assessment (RTHA) Booklet (RSK-00222)</td>
<td>Active</td>
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<tr>
<td>Work Instruction Template (TEM-00004)</td>
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<td>TRIM Ref: D13/61876</td>
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<tr>
<td>Job Safety and Environment Analysis / Safe Work Method Statement Template (TEM-00013)</td>
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<td>WHS Operational Control Register</td>
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<td>WHS Record Keeping Matrix</td>
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<td>TRIM Ref: D13/70968</td>
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<td>WHS Risk Assessment Guide (GDE-00044)</td>
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<td>TRIM Ref: D13/43229</td>
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<tr>
<td>WHS Risk Assessment Form (TEM-00008)</td>
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<td>TRIM Ref: D13/71248</td>
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<tr>
<td>WHS Risk Register Template (TEM-00023)</td>
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<td>TRIM Ref: D13/47868</td>
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11. Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Administrative activity</td>
<td>Any activity performed in an administration area that is not a work activity. This includes: working at a computer, photocopying or scanning, changing the toner in a printer, attending training. The following are not considered to be administrative activities: relocating office furniture, moving tables and chairs to set up a meeting room, installing new computer hardware when this activity involves lifting or access under a desk, any activity that requires the use of a ladder, undertaking stocktake or tidying a storage area.</td>
</tr>
<tr>
<td>Administration area</td>
<td>Means any area that is used for administrative purposes only, consisting of offices, desks and meeting rooms.</td>
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<tr>
<td>Construction work</td>
<td>Construction work means 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. This includes: any installation or testing carried out in connection with</td>
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<tr>
<td>Term</td>
<td>Definition</td>
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<td></td>
<td>an activity mentioned above</td>
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<td>• the removal from the workplace of any product or waste resulting from demolition</td>
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<td></td>
<td>• the prefabrication or testing of elements, at a place specifically established for the construction work, for use in construction work</td>
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<td></td>
<td>• the assembly of prefabricated elements to form a structure or the disassembly of prefabricated elements forming part of a structure</td>
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<td></td>
<td>• the installation, testing or maintenance of an essential service in relation to a structure</td>
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<td></td>
<td>• any work connected with an excavation</td>
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<td></td>
<td>• any work connected with any preparatory work or site preparation (including landscaping as part of site preparation) carried out in connection with an activity mentioned above</td>
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<td></td>
<td>an activity mentioned above that is carried out on, under or near water, including work on buoys and obstructions to navigation.</td>
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<tr>
<td>Dangerous incident</td>
<td>An incident in relation to a workplace that exposes a worker or any other person to a serious risk to a person's health or safety emanating from an immediate or imminent exposure to:</td>
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<tr>
<td></td>
<td>• an uncontrolled escape, spillage or leakage of a substance</td>
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<td>• an uncontrolled implosion, explosion or fire</td>
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<td>• an uncontrolled escape of gas or steam</td>
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<td>• an uncontrolled escape of a pressurised substance</td>
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<td></td>
<td>• electric shock</td>
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<td></td>
<td>• the fall or release from a height of any plant, substance or thing</td>
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<td></td>
<td>• the collapse, overturning, failure or malfunction of, or damage to, any plant that is required to be authorised for use in accordance with the regulations</td>
</tr>
<tr>
<td></td>
<td>• the collapse or partial collapse of a structure</td>
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<td></td>
<td>• the collapse or failure of an excavation or of any shoring supporting an excavation</td>
</tr>
<tr>
<td></td>
<td>• the inrush of water, mud or gas in workings, in an underground excavation or tunnel</td>
</tr>
<tr>
<td></td>
<td>• the interruption of the main system of ventilation in an underground excavation or tunnel</td>
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<tr>
<td></td>
<td>• any other event prescribed under a regulation, but does not include an incident of a prescribed kind.</td>
</tr>
<tr>
<td>Design</td>
<td>Design in relation to plant, a substance or a structure includes:</td>
</tr>
<tr>
<td></td>
<td>• design of part of the plant, substance or structure</td>
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<tr>
<td></td>
<td>• redesign or modification of a design.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Effective control</td>
<td>The meaning of an effective control includes fit for purpose, being suitable for the nature and duration of the work and installed, set up and used correctly.</td>
</tr>
<tr>
<td>First aid injury</td>
<td>Any once-off treatment and/or subsequent observation of minor scratches, cuts, burns, splinters, etc, which do not require professional medical treatment (however, in some instances, a medical practitioner or registered professional, may administer the first aid).</td>
</tr>
<tr>
<td>Hazard</td>
<td>A situation that has the potential to harm a person and/or the environment and/or damage property.</td>
</tr>
<tr>
<td>Hazardous chemical</td>
<td>Means a substance, mixture or article that satisfies the criteria for a hazard class in the Globally Harmonised System (GHS) (including a classification mentioned in schedule 6 of the Work Health and Safety Regulation 2011 (Qld)), but does not include a substance, mixture or article that satisfies the criteria solely for one of the following hazard classes: (a) acute toxicity – oral – category 5 (b) acute toxicity – dermal – category 5 (c) acute toxicity – inhalation – category 5 (d) skin corrosion/irritation – category 3 (e) serious eye damage/eye irritation – category 2B (f) aspiration hazard – category 2 (g) flammable gas – category 2 (h) acute hazard to the aquatic environment – category 1, 2 or 3 (i) chronic hazard to the aquatic environment – category 1, 2, 3 or 4.</td>
</tr>
<tr>
<td>Hazardous manual task</td>
<td>Means a task that requires a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any person, animal or thing that involves one or more of the following: • repetitive or sustained force • high or sudden force • repetitive movement • sustained or awkward posture • exposure to vibration.</td>
</tr>
<tr>
<td>Hierarchy of controls</td>
<td>Identify the risk control actions and responsibilities by identifying controls in the following specific order: • Eliminate the hazard. If elimination of the hazard is not reasonably practicable, minimise the risk so far as reasonably practicable by: • substituting (wholly or partly) the hazard giving rise to the risk with something that gives rise to a lesser risk • isolating the hazard from any person exposed to it • implementing engineering controls. If a risk then remains, then minimise the remaining risk, so</td>
</tr>
</tbody>
</table>
### Term | Definition
--- | ---
far as is reasonably practicable, by implementing administrative controls. If a risk then remains, then minimise the remaining risk, so far as is reasonably practicable, by ensuring the provision and use of suitable Personal Protective Equipment (PPE). | 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
- 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.

Hot work: Any process involving grinding, welding, brazing, oxy cutting, heat treatment or any other similar process that generates heat or continuous streams of sparks (uncontrolled heat). Note: the use of Bunsen burners in a laboratory environment, tap flaming for water sampling or use of gas BBQ (controlled heat) is not considered hot work.

Incident: An event or circumstance that could have or did lead to
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>unintended and/or unnecessary harm to a person and/or loss or damage or adverse consequences. This definition of an incident includes near misses.</td>
</tr>
<tr>
<td>Line Supervisor</td>
<td>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 WHS Management System as identified in the WHS Management System and/or position description.</td>
</tr>
<tr>
<td>Lost time injury</td>
<td>A work-related incident that results in an injury or illness and time lost from work of one day/shift or more.</td>
</tr>
<tr>
<td>Manager</td>
<td>A person with the responsibilities for managing a functional area of the business including the workers within the relevant functional area. This includes, but is not limited to, Level 3 Managers, General Managers and Project Managers. A manager is also considered a worker, however managers may have additional responsibilities for implementation of the WHS Management System as well as any additional responsibilities as an officer of the business.</td>
</tr>
<tr>
<td>Medically treated injury</td>
<td>An incident which results in the consequence of an injury to a person requiring treatment by, or under the order of, a qualified medical practitioner, or treatment of any injury that could be considered as being one that would normally be treated by a medical practitioner.</td>
</tr>
<tr>
<td>Near miss</td>
<td>Any unplanned incident that occurred at the workplace which, although not resulting in any injury or illness, had the potential to do so.</td>
</tr>
<tr>
<td>Notifiable incident</td>
<td>An incident which involves:</td>
</tr>
<tr>
<td></td>
<td>• the death of a person; or</td>
</tr>
<tr>
<td></td>
<td>• a serious injury or illness of a person; or</td>
</tr>
<tr>
<td></td>
<td>• a dangerous incident.</td>
</tr>
<tr>
<td>Officer</td>
<td>A person will be an “officer” for the purpose of the WHS Act if the person makes, or participates in making, decisions that affect the whole, or a substantial part, of Seqwater’s business or undertaking. This definition of an officer will commence in the Electrical Safety Act from 1 January 2014.</td>
</tr>
</tbody>
</table>

**Board members**

Members of the Seqwater Board are officers.

The Board’s role, powers, responsibilities and accountabilities are set out in the South East Queensland Water (Restructuring) Act 2007 (Qld), which informs the Board Charter setting out the role of the Board. The role of the Board includes setting Seqwater’s strategic aims, “ensuring a framework of prudent and effective controls to enable risk to be assessed and managed” and to “monitor and assess senior management’s performance and implementation of strategy”.

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The controlled version of this document is registered. All other versions are uncontrolled.
Members of the Executive Leadership Team
A high level consideration of Seqwater’s Executive Leadership Team suggests that the following non-exhaustive list of roles would also likely be considered officers for the purpose of the Work Health and Safety Act 2011 (Qld) to the extent they make or participate in making decisions that affect the whole or a substantial part of Seqwater’s business:

- Chief Executive Officer
- Chief Financial Officer
- General Manager Operations – Catchments and Raw Water
- General Manager Water Supply Strategy and Policy
- General Manager Asset Portfolio Development and Delivery
- General Manager Service, People and Technology
- General Manager Operations – Treated Water
- General Counsel and Company Secretary.
- Other roles within the business

While not all people in management roles will be officers, there may be other senior managers who are also considered to be officers for the purposes of the Work Health Safety Act 2011 (Qld) because of their role in participating in the making of decisions affecting either the whole of, or a substantial part of Seqwater’s business.

In either case, all managers will nevertheless have responsibilities as workers under the Work Health Safety Act 2011 (Qld). The duties of managers at Seqwater will be commensurate with their capacity for making decisions affecting the safety and health of other workers or other persons affected by work carried out by Seqwater.

Operational work
Work which is not construction work, but involves:
- repair, maintenance and/or fabrication work
- hazardous manual tasks
- use or handling of hazardous chemicals
- hot work
- working remotely or in isolation.

Work which is not construction work, but is work that:
- 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
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
</table>
| 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  
• 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, 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.                                                                 |
| Personal Protective Equipment (PPE)        | Any clothing, equipment or substance designed to protect a person from risks of injury or illness.                                                                                                                                                                                                                                           |
| Preventive action                          | Any action to eliminate the cause of a potential non-conformity or other undesirable potential situation.                                                                                                                                                                                                                                    |
| Reasonably practicable                     | The following criteria must be applied in determining what is reasonably practicable:  
• What the person knows or ought to reasonably know about the hazard and ways of eliminating or minimising the hazard  
• Availability and suitability of ways of eliminating or minimising the hazard  
• The cost associated with the availability and suitability of ways of eliminating or minimising the hazard, taking into account the cost if it is grossly disproportionate to the risk.                                                                 |
<p>| Risk                                      | Risk is the likelihood and consequence of injury or harm occurring when exposed to a hazard.                                                                                                                                                                                                                                               |
| Risk control                              | Means 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.                                                                 |</p>
<table>
<thead>
<tr>
<th>Term / Definition</th>
<th>Definition</th>
</tr>
</thead>
</table>
| The hierarchy of controls must be utilised when selecting appropriate risk controls. | Safe Work Method Statement (SWMS) 
A SWMS sets out steps to enable 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. It sets out the work activities in a logical sequence and identifies hazards and describes control measures. |
| Serious injury or illness | An injury or illness requiring the person to have:  
- immediate treatment as an in-patient in a hospital  
- immediate treatment for:  
  - the amputation of any part of his or her body  
  - a serious head injury  
  - a serious eye injury  
  - a serious burn  
  - the separation of his or her skin from an underlying tissue (such as degloving or scalping)  
  - a spinal injury  
  - the loss of a bodily function  
  - serious lacerations  
- medical treatment within 48 hours of exposure to a substance  
   It includes any other injury or illness prescribed under a regulation but does not include an illness or injury of a prescribed kind. |
| Work activity | An activity involving one or more of the following:  
- inspection  
- testing  
- calibration  
- maintenance  
- repair  
- construction  
- demolition  
- delivery  
- cleaning |
| Worker | Worker means a person who carries out work in any capacity for Seqwater, including work as:  
- an employee  
- a contractor or subcontractor  
- an employee of a contractor or subcontractor  
- an employee of a labour hire company who has been assigned to work at Seqwater  
- an outworker |
## Term Definition

- an apprentice or trainee
- a student gaining work experience
- a volunteer
- a worker of a prescribed class.
## Appendix A - Hazard categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Potential Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual tasks</td>
<td>Overexertion or repetitive movement can cause muscular strain.</td>
</tr>
<tr>
<td>Gravity</td>
<td>Falling objects, falls, slips and trips of people can cause fractures, bruises, lacerations, dislocations, concussion, permanent injuries or death.</td>
</tr>
<tr>
<td>Electricity</td>
<td>Exposure to live electrical wires can cause shock, burns or death from electrocution. In addition, electricity is a potential ignition source.</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>Being hit by moving vehicles, or being caught by moving parts of machinery can cause fractures, bruises, lacerations, dislocations, permanent injuries or death.</td>
</tr>
<tr>
<td>Hazardous chemicals</td>
<td>Chemicals (such as acids, hydrocarbons, heavy metals) and dusts (such as asbestos and silica) can cause respiratory illnesses, cancers or dermatitis or create unsafe atmospheric conditions.</td>
</tr>
<tr>
<td>Extreme temperatures</td>
<td>Heat can cause burns, heat stroke or fatigue. Cold can cause hypothermia or frost bite.</td>
</tr>
<tr>
<td>Pressure</td>
<td>Pressure can result in penetration, crush, respiratory problems or death.</td>
</tr>
<tr>
<td>Fire/explosion</td>
<td>Fire or explosion can cause burns, respiratory problems/injuries or death.</td>
</tr>
<tr>
<td>Noise</td>
<td>Exposure to loud noise can cause permanent hearing damage.</td>
</tr>
<tr>
<td>Radiation</td>
<td>Ultra violet, welding arc flashes, microwaves and lasers can cause burns, cancer or blindness.</td>
</tr>
<tr>
<td>Biological</td>
<td>Micro-organisms can cause hepatitis, legionnaires’ disease, Q fever, HIV/AIDS or allergies.</td>
</tr>
<tr>
<td>Psychosocial hazards</td>
<td>Hazards from the effects of work-related stress, bullying, violence and work-related fatigue.</td>
</tr>
</tbody>
</table>
Appendix B - WHS Risk Assessment Guide

The following five steps are to be taken to complete a WHS risk assessment in accordance with the WHS Hazard Identification and Risk Management Procedure (PRO-00657).

**STEP 1 – Hazard identification**
Find out what could cause harm

**STEP 2 – Risk assessment: inherent risk**
Identify the consequence
Identify the likelihood
Rate the inherent risk using the Seqwater WHS risk rating matrix
Determine actions to be taken in accordance with the hierarchy of controls

**STEP 3 – Control risks**
Implement the most effective control measures that are reasonably practicable in the circumstances

**STEP 4 – Risk assessment with control measures: residual risk**
Re-apply the WHS risk rating matrix to re-assess the risk for each task with the control measures implemented

**STEP 5 – Monitor and review control measures**
Ensure they are working as planned and develop a treatment plan for corrective actions where required

---

**Establish the consequence**
What is the maximum reasonable consequence of the unwanted event, incident or circumstance occurring?

<table>
<thead>
<tr>
<th>Consequence</th>
<th>Insignificant</th>
<th>Minor</th>
<th>Moderate</th>
<th>Major</th>
<th>Catastrophic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms requiring no treatment or first aid treatment only.</td>
<td>Minor temporary injury or illness requiring medical treatment.</td>
<td>Moderate injury or temporary impairment</td>
<td>One or more entire shift missed as a result.</td>
<td>Permanent injury or impairment.</td>
<td>≥1 Fatalities.</td>
</tr>
</tbody>
</table>

**Establish the likelihood**
What is the likelihood that the unwanted event will occur and the maximum reasonable consequence will occur, with the identified risk controls in place?

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Rare</th>
<th>Unlikely</th>
<th>Possible</th>
<th>Likely</th>
<th>Almost certain</th>
</tr>
</thead>
<tbody>
<tr>
<td>The event could occur only in exceptional circumstances</td>
<td>The event could occur at some time, but only in unusual circumstances</td>
<td>The event might occur, but not expected to occur under normal circumstances</td>
<td>The event will probably occur in most circumstances</td>
<td>The event is expected to occur in most circumstances</td>
<td></td>
</tr>
</tbody>
</table>

**Rate the risks**
Rate the risk using the WHS Risk Rating Matrix.

![Risk Rating Matrix](image)
Determine action
Based on the highest risk rating of the four categories of risk – low, medium, high or extreme, implement the following actions:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Approval required</th>
<th>Action required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme</td>
<td>CEO or Board</td>
<td>Intolerable risk. Activity must not be undertaken. The risk must be reported to the CEO and Board. Notify WHS team via <a href="mailto:safety@seqwater.com.au">safety@seqwater.com.au</a></td>
</tr>
<tr>
<td>High</td>
<td>General Manager</td>
<td>Intolerable risk. Activity must not be undertaken prior to General Manager approval. Approver/s must ensure the risk has been eliminated or minimised in accordance with the hierarchy of controls so far as is reasonably practicable. Notify WHS team via <a href="mailto:safety@seqwater.com.au">safety@seqwater.com.au</a></td>
</tr>
</tbody>
</table>
| Medium   | Line supervisor   | The following process must be applied:  
1. Consult site WHS risk register and ensure identified controls are effectively implemented.  
2. Confirm activity, risk assessment and controls with the immediate line supervisor.  
3. Seek advice from the Regional WHS Advisor and implement any additional identified controls.  
The line supervisor must confirm controls, assess and approve or reject the activity. |
| Low      | Workers or persons in charge of the task or activity | Carry out activity following review and implementation of effective risk controls in accordance with the hierarchy of controls.  
Monitor risk controls to ensure that they are maintained at their present level or at a lower level of risk that current day-to-day work practices can effectively manage.  
Ongoing monitoring and management required by workers and line supervisors using routine procedures. |

Hierarchy of controls
Select and implement control measures in accordance with the specific order of the hierarchy of controls. The hazard must be eliminated so far as is reasonably practicable. If unable to eliminate, the hazard must be minimised so far as is reasonably practicable following the specific order.

<table>
<thead>
<tr>
<th>HIERARCHY OF CONTROL MEASURES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eliminate</td>
<td>First option – most effective: can the hazard be removed altogether by elimination of process or substance?</td>
</tr>
<tr>
<td>Substituting</td>
<td>Involves replacing the hazard with one that presents a lower risk.</td>
</tr>
<tr>
<td>Isolating</td>
<td>Separate yourself from the hazard or separate the hazard from you.</td>
</tr>
<tr>
<td>Engineering</td>
<td>Change the design of equipment, the workplace or the process …… do it differently.</td>
</tr>
<tr>
<td>Administrative controls</td>
<td>Reduce or eliminate the exposure to a hazard by adherence to procedures, instructions, signage or training. Administrative controls are dependent on human behaviour for success.</td>
</tr>
<tr>
<td>Personal Protective Equipment (PPE)</td>
<td>Last option – least effective: provides a barrier between a person and the hazard. This is dependent on PPE being chosen correctly as well as fitted and work at all times where required.</td>
</tr>
</tbody>
</table>

For more information refer to:
- WHS Hazard Identification and Risk Management Procedure (PRO-00657)
- Enterprise Risk Management Framework (PLN-00294)

Key contacts
Seqwater Incident Hotline: 3270 4040  
Network Control Room: 3270 4050  
Email: safety@seqwater.com.au
Appendix C – JSEA/SWMS process flow chart

Start

Is the work high-risk construction work, permit controlled work or pre-approved work?

Yes

Does the work involve electrical work, isolation or working on or around water?

Yes

Review JSEA/SWMS

Stop and think through the tasks

Yes

Is the RTHA residual risk rating medium or greater for any hazards?

Yes

Develop a JSEA/SWMS

Stop and think through the tasks

No

Does a pre-populated JSEA/SWMS exist for the activity?

Yes

Identify and describe the hazards

No

Identify and describe the hazards

Yes

Identify the consequence and likelihood for each hazard and derive the inherent risk rating

For each hazard identify the controls to be implemented

Calculate the residual risk rating

No

Are any residual risk ratings medium or greater?

Yes

Obtain approval from delegated person before commencing activity Delegations are: Extreme risk – Board/CEO High risk – level 3 manager Medium risk – line supervisor

Approval provided?

No

No

No

No

End

Yes

Work team signs off JSEA/SWMS

Implement controls and complete tasks, ensuring continuing monitoring of control effectiveness

For newly created JSEA/SWMS – ensure an electronic version of the JSEA/SWMS is developed and saved for future use.

For existing JSEA/SWMS – ensure that any required amendments to the JSEA/SWMS are recorded and the electronic copy updated for future use.

This process applies to Seqwater workers. Where a contractor has an evaluated and approved safety management system the contractor may use their own forms in the process.