

Drinking water regulatory audit

Guidance note: Edition 2

July 2009

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Introduction

The key objective of Victoria's drinking water quality regulatory framework is the protection of public health, utilising strategies such as catchment to tap risk management and continuous improvement. This risk-based approach to drinking water quality promotes proactive, rather than reactive, management of drinking water quality and is fully aligned with the approach used in the '*Australian Drinking Water Guidelines*' (2004).

The *Safe Drinking Water Act 2003* (the Act) requires water suppliers and water storage managers to prepare, implement and review risk management plans for their supply of drinking water and regulated water. Under section 11 of the Act, the Secretary to the Department of Human Services, or their delegate, is empowered to request that a water supplier or water storage manager have their risk management plan audited.

The regulatory audit is a systematic and independent examination of a water quality risk management plan, to determine:

- Whether the plan has been prepared in accordance with the requirements of the Act and the Safe Drinking Water Regulations 2005.
- Whether the plan has been implemented and complied with.
- Whether the plan has been reviewed and, where appropriate, revised.
- Whether the plan adequately identifies the nature and level of hazards and risks for each of the water supply systems covered in the scope of the audit.
- Whether the control measure identified in the plan are in place operationally and are adequate to reliably control water safety risks.

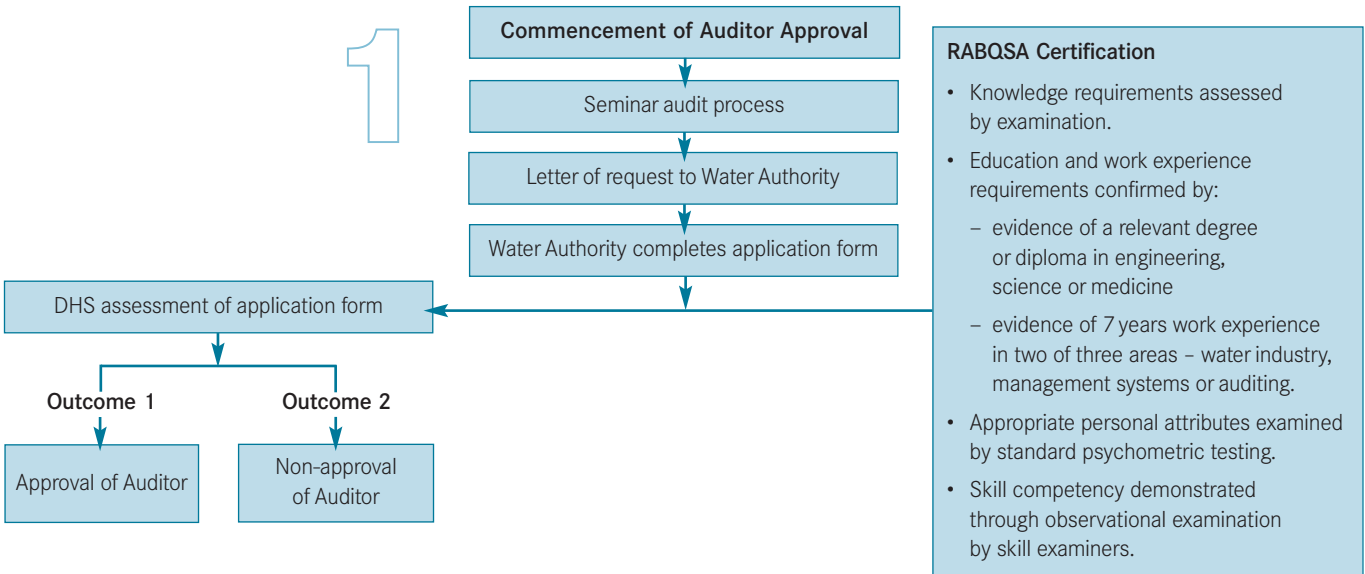
The audit process is the key to the drinking water quality regulatory framework in Victoria. The Department of Human Services believes that the audit process will identify continuous improvement and educational opportunities that will reinforce a culture of effective risk management in the water industry in Victoria.

The aim of this document is to provide additional information about the risk management plan audit to all stakeholders, to provide guidance to approved auditors and to ensure that there is consistency in the assessment and reporting of audit results. This document covers the process by which an audit is requested by the Secretary, the process and criteria used to approve an auditor and information on the scope of the audit, including assessment and reporting on audits.

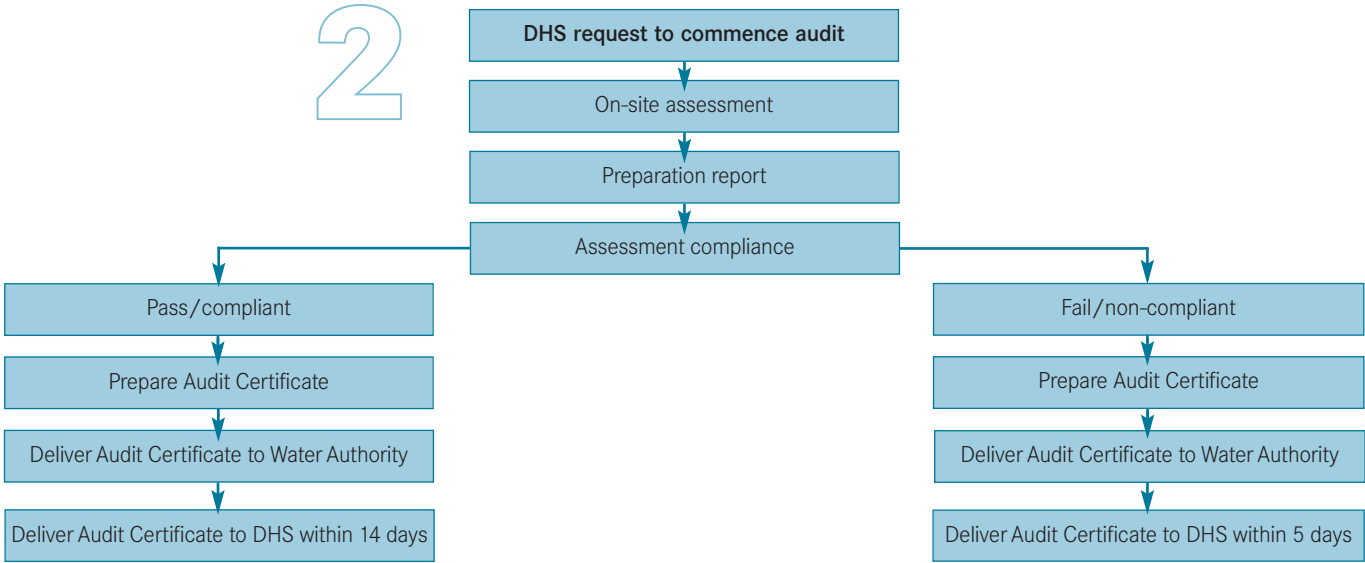
This document has been updated for the 2009 round of audits, based on feedback from auditors and the water industry on the outcomes of the first round of audits in 2008.

The Audit Process

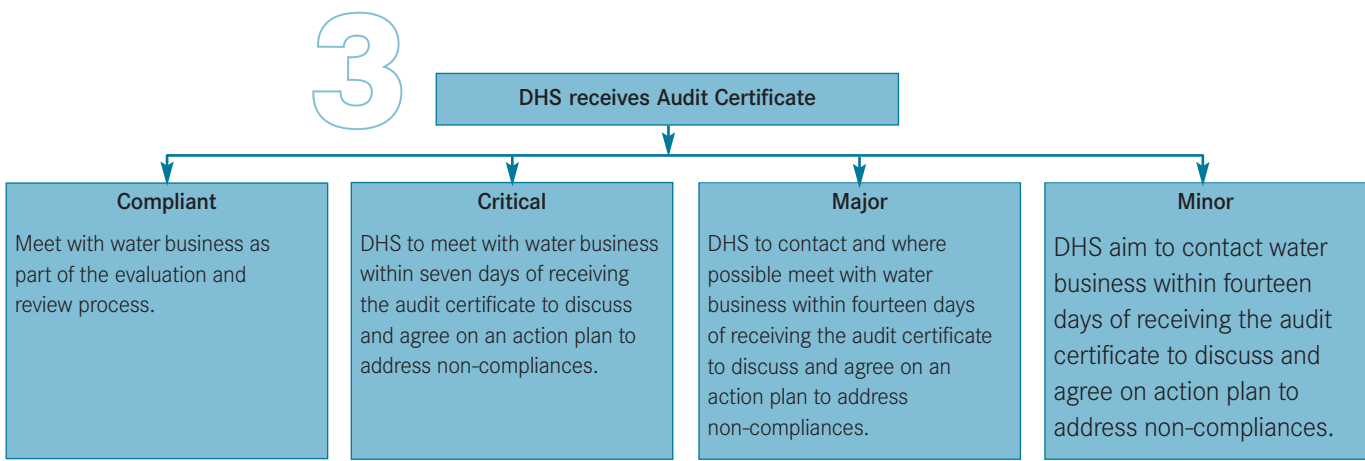
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Roles for a Department of Human Services regulatory audit

The Drinking Water Regulatory Section

The broad role of the Department of Human Services' Drinking Water Regulatory Section is to implement and monitor compliance with the *Safe Drinking Water Act 2003* (the Act) and to report to Parliament on water quality issues in Victoria.

The specific role of the Section in relation to the regulatory audit system is to ensure that the audits are conducted in accordance with the Act and provide adequate support mechanisms, including to:

1. Establish and maintain processes to approve risk management plan auditors.
2. Specify conditions attached to the approval of an auditor.
3. Determine the time, frequency and the period to be covered by an audit for each water supplier and water storage manager.
4. Define the scope of the audit.
5. Define the criteria for assessment and reporting of the audit.
6. Work with water suppliers and water storage managers to ensure the findings of the audits are effectively utilised or rectified, as required, and to create sector-wide learning opportunities where appropriate.
7. Establish and maintain communications with all stakeholders.
8. Establish processes to manage complaints or disputes between auditors and water suppliers or water storage managers.
9. Establish evaluation, review and revision processes to ensure that the audit is meeting all objectives for all parties.
10. Establish criteria for publication of details of audits in water quality annual reports.

Water suppliers and water storage managers

The role of a water supplier is to manage risk in relation to the supply of drinking water or regulated water to the public and ensure that drinking water they supply is safe and complies with the quality standards specified in the legislation.

The role of a water storage manager is to manage risk in relation to its supply of water to a water supplier. The water storage manager may treat this water to a drinking standard or the water storage manager may supply it as untreated water.

The role of water suppliers and water storage managers in relation to the regulatory audit system is to:

1. Meet the requirements of the *Safe Drinking Water Act 2003* and the *Safe Drinking Water Regulations 2005* with respect to risk management plans and their audit.
2. Nominate an auditor for approval in accordance with the legislated requirements.
3. Ensure an approved auditor audits their risk management plan by the date and covering the period specified by the Department.
4. Ensure that all documents required by the auditor, including the risk management plan, are available.
5. Work with the Drinking Water Regulatory Section of the department to ensure the findings of the audit are acted upon.
6. Undertake the audit at their own expense.
7. Disclose the audit results, including the audit certificate, in the next annual water quality report.

The Auditor

An auditor is responsible for auditing the risk management plan of the water supplier or water storage manager in order to determine if the plan is compliant with the requirements of the legislation. The audit must be completed by the date, and cover the period specified by the Department of Human Services.

The auditor must:

1. Meet the requirements of the auditor approval process.
2. Ensure that the ‘Conflict of Interest’ criteria are complied with.
3. Assess whether the water supplier or water storage manager has complied with the relevant requirements of the legislation in relation to their risk management plan.
4. Examine the documents specified in the Regulations as part of the audit.
5. Provide a certificate that states whether the water supplier or water storage manager has complied with the obligations imposed by the legislation, or if they have not, state the reasons and notify the department in accordance with the requirements of the legislation.

Audit timing

Under section 11 of the Act, the Secretary to the Department of Human Services, or their delegate, has the power to determine the audit frequency, the timing of the audit and the time period for which the risk management plan must be audited. This will be done by written notice to the water supplier or water storage manager. This notice will specify a date by which the audit must be completed. The water supplier or water storage manager is responsible for ensuring that the audit is completed by this date.

Becoming an auditor

Only approved auditors may conduct the audit of a risk management plan and the related activities of a water supplier or water storage manager for the purposes of the *Safe Drinking Water Act 2003*. Under section 13 of the Act, the Secretary to the Department of Human Services, or their delegate, can approve individuals nominated by a water supplier or water storage manager as auditors. This is based on a set of criteria that ensures that the auditor is appropriately qualified and skilled to conduct the audit and that they have no conflict of interest that would impinge on their ability to objectively conduct the audit.

Auditor certification

In collaboration with the Department of Human Services and key stakeholders Water Services Association of Australia and the Victorian Water Industry Association, RABQSA International¹ has developed an auditor certification scheme for drinking water quality risk management systems. The scheme provides international recognition for auditors of these systems to ensure that drinking water service providers can demonstrate that they are managing risk in accordance with the risk management framework as set out in the ‘*Australian Drinking Water Guidelines*’ (2004).

¹ RABQSA International designs, develops and delivers certification for industry-specific and management system-specific streams.

The scheme establishes an Australia-wide certification for auditors with competence in the area of drinking water risk management systems, and forms the core criteria for persons wishing to apply for approval to undertake audits in accordance with the Act. Certified auditors under the scheme will have the high level of skill and knowledge that the Department of Human Services is seeking for auditors to undertake the Victorian regulatory audits.

The scheme is competency based, with a requirement for pre-existing qualifications and is administered by RABQSA International. The complete requirements and process are set out in the RABQSA publication ‘Drinking Water QMS Auditor Certification Training Scheme Certification Requirements’, which can be found at: www.rabqsa.com/cb_wsa.

In summary, the certification requirements are:

- Knowledge of the ‘*Australian Drinking Water Guidelines*’ (2004) framework for drinking water quality assessed by examination.
- Education and work experience requirements confirmed by:
 - evidence of a relevant degree or diploma in engineering, science or medicine
 - evidence of seven years work experience in two of three areas – water industry, management systems or auditing
- Appropriate personal attributes examined by standard psychometric testing.
- Skill competency demonstrated through observational examination by skill examiners.

The scheme provides two levels of certification – ‘Lead DW QMS Auditor’ and ‘DW QMS Auditor’.

The requirement of the legislation is for an auditor to be an individual (a ‘natural person’). However, the department recognises that an individual auditor may require a team to provide technical and other specialised support. The requirement for an approved auditor with responsibility for leading a team of auditors to have certification at ‘Lead DW QMS Auditor’ level will be decided for each application.

The factors that will be considered include the size of the audit team, the audit certification status of the team members and the complexity of the water supplier or water storage manager being audited. The lead auditor must make final determination of assessments and grades and complete and sign the audit certificate.

The name and contact details of auditors certified under the RABQSA scheme are available on the RABQSA database on their web site.

Conflict of interest

For the purposes of being approved as an auditor under the Act, the following are considered to be conflicts of interest:

- Writing or assisting in the preparation or review of the risk management plan for the water supplier or water storage manager that is making the application.
- In the past two years having been an employee of the water supplier or water storage manager making the application.

The amount and type of contract work the auditor, audit team or auditor's employer has performed for the water supplier or water storage manager in the previous two years may also be taken into consideration when assessing the issue of potential conflicts of interest. This includes work relating to design, construction or operation of water treatment plants.

An approved auditor may have undertaken a previous risk management plan audit of the water supplier or water storage manager.

Auditor approval

The department's process for approval of auditors requires the water supplier or water storage manager to submit the following:

- 'Auditor Application' form
- 'Conflict of Interest' forms, including conflict of interest for potential team members
- RABQSA certification and audit log for the prospective auditor

If the prospective auditor was approved as an auditor in 2008, then the RABQSA certification and audit log do not need to be resubmitted.

The application forms are available on the department's website: www.health.vic.gov.au/environment/water/drinking and in Appendices 4 and 5 of this document.

Completed application forms must be addressed to:

**Assistant Director Environmental Health
Department of Human Services
GPO Box 4057
Melbourne VIC 3001**

They may be submitted by mail to the address above, facsimile to 1300 768 874 or by email to: dwru@dhs.vic.gov.au

The Department will provide written confirmation of approval of an auditor, to both the water business and the auditor, identifying:

- the auditor name(s).
- the risk management plan they are approved to audit.
- the duration of the approval.
- any conditions imposed on the approval.
- the Auditor Approval Notice number.

Auditors must maintain their certification with RABQSA International for the duration of their approval period. Auditors are also expected to retain records of the audit process, minutes of meetings with the water business and various drafts of the audit report, including being required to explain any significant changes in conclusions between early drafts and final drafts of the audit report.

Please note that approvals granted by the department for the 2008 round of audits expired on 31 December 2008. Section 14 of the Act prohibits a person from conducting a risk management plan audit or issuing a certificate in relation to such an audit unless he or she is an approved auditor.

Penalties under the *Safe Drinking Water Act 2003*

Table 1: Penalties associated with the audit requirements of the Act:

Section 12(3)	Notification by an auditor of a non-compliance with Section 7(1) or 8(1) more than five days after completing the audit	60 penalty units
Section 14	Conduct of an audit by a person not approved as an auditor	60 penalty units
Section 15	Failure of an auditor to comply with conditions of approval	60 penalty units
Section 16	Failure to meet 'conflict of interest' conditions	60 penalty units
Section 31	Contravention of sections 7, 8, 11(2) of the Act or being in breach of an undertaking accepted under section 30.	240 penalty units

Sections 12 (3), 14, 15 or 16 of the Act apply to approved auditors or persons conducting a risk management plan audit. Section 31 of the Act applies to water suppliers and water storage managers.

A penalty unit under Victorian law for 2009-10 is \$116.82.

Scope of audit

Section 10 of the Act describes a risk management plan audit. It requires an auditor to determine whether a water supplier has complied with the obligations imposed by section 7(1) of the Act during the audit period for drinking water or regulated water, or a water storage manager has complied with the obligations imposed by section 8(1) of the Act during the audit period for water supplied to a water supplier.

Sections 7 and 8 of the Act refer to section 9 of the Act, thence more detail in regulations 6, 7, 8 and 9 of the Safe Drinking Water Regulations 2005 (the Regulations).²

The obligations in sections 7, 8 and 9 of the Act and in the regulations can be categorised into four distinct groupings, identified in this guidance note as auditable elements. They are:

- Risk management plan (contents)
- Risk management activities
- Risks to water supply
- Documented procedures

The auditable elements are described in Appendix 6. Appendix 6 also refers to the components of the Framework for Managing Drinking Water Quality set out in chapters 2 and 3 of the *Australian Drinking Water Guidelines* (2004, Canberra) that are relevant to the regulatory obligations in Victoria. These are provided for information only – other risk management schemes can be used if they meet the requirements of the legislation.

To ensure that all water suppliers and water storage managers are measured against a common framework, the department requires auditors to utilise the following two-part grading system, to determine whether:

- The auditable element is present and being implemented across the entire business (breadth)
- The auditable element is effective and is achieving the desired effect or outcome (depth or quality)³

Additionally, the auditor should determine whether the identified control measures and control measure combinations are in place operationally and are adequate to reliably control water safety risks. Critical limit criteria for drinking water should be in place and should be monitored, with corrective actions identified in the event of deviations from the target or critical limit criteria. For the second round of audits, auditors should also look for evidence that there is a process to review or update the risk management plan.

The Drinking Water Regulatory Section of the department has developed a rigorous process to appoint skilled auditors with appropriate knowledge and credentials in both auditing and the water industry. The methods utilised during the audit will remain the domain of the auditor.

² The relevant sections of the legislation are listed in appendices 1 and 2 of this guidance note.

³ This 'breadth and depth' approach is also used by the Water Services Association of Australia in their Aquality assessment process to assess implementation of the Framework for Management of Drinking Water Quality.

In line with best practice, the Drinking Water Regulatory Section expects auditors to:

- Determine whether the risk management planning and operations cover all systems and all aspects of the process that the water supplier or water storage manager utilises in the production of safe drinking water or management of regulated water.
- Obtain sufficient, reliable and relevant evidence to achieve the audit objectives and to undertake appropriate analysis and interpretation of this evidence to support the findings and the conclusions of the audit.
- Be cognisant of the use of water industry-wide best practice, relevant guidelines and standards that guide the water industry in Australia (such as the '*Australian Drinking Water Guidelines*' 2004) in relation to risk management planning and operations, understanding which elements and components of the '*Australian Drinking Water Guidelines*' (2004) framework fall within the scope of the audit and which may not.⁴
- Determine if risk management is an integral part of the business through best practice such as embedded corporate governance, risk management across the entire business or internal policy and practice of the water supplier or water storage manager that match the audit (regulatory) requirements.⁵

Auditors are also expected to understand the role of the water supplier or water storage manager being audited in the catchment-to-tap chain.

The scope of the audit for **water storage managers** is restricted by section 8 of the Act to the supply of water from the water storage manager to a water supplier. In auditing a water storage manager, the auditor must consider how the risk management plan of the water storage manager interacts with that of the downstream drinking water supplier, as well as whether the water storage manager or water supplier bears the responsibility for managing risk associated with drinking water and water treatment activities downstream of the point of supply to the water supplier. This is particularly relevant in the case of water storage managers that only supply untreated water to a water supplier.

In the case of both water suppliers and water storage managers, auditors are expected to look for evidence of engagement with catchment stakeholders to establish networks which promote water quality improvements.

Regulated water systems are non-drinking water systems that have been declared as regulated water under section 6 of the Act. As it is non-drinking water, risk management plans for regulated water systems are not required to address the matters detailed in regulation 6 that specifically relate to drinking water only. Regulated water is also not expected to satisfy the quality standards that apply for drinking water. Auditors should note that not all water suppliers have regulated water systems.

⁴ The elements of the 12-element risk management framework set out in the '*Australian Drinking Water Guidelines*' that are equivalent to auditable elements under the Act are shown in Appendix 6 of this Guidance Note. Not all components or elements of the 12-element framework are auditable under the Act.

⁵ Hruddy SE, Hruddy EJ and Pollard JTP. Risk management for assuring safe drinking water. *Environment Int.* 32:948-957. 2006.

Assessing and reporting compliance

To be assessed as compliant, the water supplier or water storage manager must be able to demonstrate to the auditor that it has complied with **all** obligations imposed by the legislation. These are detailed in full as ‘auditable elements’ in Appendix 6 of this guidance note. There must be evidence that each auditable element has been developed, has been implemented and is effective, that is, it must achieve the desired effect or result, in order for an overall compliant result to be returned.

Elements of an effective procedure or process include:⁶

- a defined purpose
- a description of the operations (across a range of conditions)
- assignation of responsibility for actions and decisions
- identification of the records associated with the process
- key performance targets and measures of success
- reference documents

The auditor must assess each auditable element and assign a grade to that element that describes the compliance of the water supplier or water storage manager with the requirements of both the legislation and the actions in their risk management plan.

A non-conformance with a legislative requirement must be regarded as either a critical, major or minor non-compliance, depending on the circumstances. A non-conformance with a legislative requirement can not be regarded as an observation or identified improvement opportunity associated with a compliant outcome (for that element). The overall result for the audit would then be non-compliant.

The auditor is expected to assess enough of the plan, and its implementation, to inform his or her opinion that the water supplier or water storage manager overall is or is not meeting its regulatory obligations. It is anticipated that an audit may take up to a week, with an increasing time commitment relating to the complexity, breadth and extensiveness of the activities of the business being audited.

Where a water supplier or water storage manager being audited operates multiple water supply systems, the auditor should choose different systems to those examined in the first audit. Auditors may include some water supply systems from the previous audit if unresolved issues remain. Auditors are also expected to visit a selection of field sites to inform their conclusions about the implementation of the risk management plan.

The following sections describe the criteria for each compliance grade and the actions the auditor is required to take. In the following sections ‘Completion of the audit’ means that the auditor has signed the audit certificate, not just completed the field part of the audit.

Table 2 provides a summary of compliance grades and auditor actions.

⁶ SQT Training Ltd. ISO 9000:2000 & Quality Lead Auditor Training Package. 2003.

Compliance

A **compliant** grade can be assigned when each auditable element is present or has been implemented, and the auditor has examined sufficient evidence (such as water quality monitoring data, risk assessment and register, protocols, implementation plans, control measures, verification measures etc) to be satisfied that the element, as written or implemented across the entire business, is effective.

When both these criteria are satisfied, the auditor can assign a compliant grade to that auditable element. An auditor may assign a compliant grade whilst also noting identified improvement opportunities or making other observations (refer case studies below).

When a water supplier or water storage manager is assessed as compliant on all auditable elements, the auditor is required to complete a certificate to this effect, in accordance with sections 12 of the Act and Schedule 1 of the Regulations, and give that certificate to the person who commissioned the audit.

The auditor must also forward the certificate to the department within 14 days of completion of the audit. This requirement on the auditor is a condition their approval. Any identified improvement opportunities or other observations should be referred to in the audit report but should not be included or referred to on a compliant certificate.

Case Study 1

A water supplier operates a reservoir that has a history of seasonal algal blooms. The risk management plan includes an annual monitoring program, with increased sampling frequency during those seasonal periods where records have shown that blooms are likely to occur. In addition to the monitoring protocol, the plan also includes a seasonal preventative program of dosing with approved algicides, working with local land owners to reduce nutrient run-off and a communications strategy to ensure that customers are not exposed to public health risk by consuming the water.

The treatment plant has PAC facility and the reservoir can be taken off-line if required. The plan includes the Blue-Green Algae Co-ordination Arrangements set by Government Departments and the Guidance note for incident reporting to the department under section 22 of the Act.

Audit finding

The water supplier has met the requirements of the Act because it has both identified a risk to the quality of water and can show that it has implemented an effective action in place to manage the risk. Compliance is demonstrated for this element.

Case Study 2

The risk management plan of a water supplier includes a staff and stakeholder database that identifies the names, contact details and positions held by staff responsible for managing hazards and risks to the quality of drinking water. The database also includes a list of responsibilities of these staff that is mapped to the risk register for the water supply system.

In addition, a sub-set of the database identifies names and contact details of staff with a role in the standard operating procedures used when there are incidents, events and emergencies that may adversely affect the quality and safety of drinking water.

The databases are electronic, readily available for all staff on the business intranet and in a controlled hard copy in a central location. Dated hard copies are also available for use in the event that the central computer system is unavailable. There is a protocol for updating the lists, including removing and adding details as staff movement occurs.

Audit finding

The risk management plan includes the names and details required by the Regulations and also has a quality management protocol that ensures the list is up-to-date regardless of staff changes or restructures. The water supplier is deemed to be compliant for this element.

Comment: If the plan identified positions held, but not names or contact details, of staff responsible for managing the hazards and risks, then the finding would be changed to a minor non-compliance, as this would not have complied with regulation 6 (1) (a).

Case Study 3

A water supplier has a risk management plan that has a small number of maintenance and inspection actions for a group of risks that have been identified as 'Low' level, that is, they have a minor consequence and an unlikely chance of occurring. These activities are to be recorded in a 'Low Risk Maintenance' log book. The risk management plan notes that they should be reviewed twice yearly.

Audit finding

At the time of the audit, the 'Low Risk Maintenance' log books have been filled out intermittently. There is no evidence that the business has reviewed the findings in the preceding 12-month period. The auditor assesses this as an identified improvement opportunity, as this is not in contravention of a section of the legislation and the impact is minimal. If all other parts of the audit have been successful, the auditor records a compliant result for the audit certificate, but notes this as a continual improvement opportunity.

Comment: If the auditor made a large enough number of related findings, he or she may conclude that, collectively, they form a minor non-compliance, as this was more likely to demonstrate some systemic problem in implementing actions in a plan.

Case Study 4

A water storage manager's risk management plan includes an action to develop 'Hazard fact sheets' for contaminants that have a low risk of occurring in their water supply. The purpose of these is to improve staff knowledge of potential contaminants that staff do not regularly deal with. The plan identified a date for completion of these sheets that was set for June 2010. The water storage manager has not commenced work on the fact sheets at the time of the 2009 audit.

Audit finding

This is regarded as compliant (in a 2009 audit), due to the low chance of contamination, and the fact that staff can find the information from other sources, although it would take a longer period of time to establish a response. The auditor may note commencing work on the fact sheets in a timely fashion as an identified improvement opportunity.

Non-compliance

Following assessment of the risk management plan and implementation, the auditor will grade individual non-compliances as **critical**, **major**, or **minor**, based on the following criteria. The auditor will need to make an informed judgement on the potential risk and public health impact of the non-compliance and **recommend corrective action**.

A **critical non-compliance** is defined as a non-compliance with one or more of the auditable elements, legislative requirements or risk management activities where a serious or imminent risk to public health is identified. That is, if the practice, the process or situation is allowed to continue (or conversely is not implemented) it is very likely to compromise the health of consumers.

In the event that the auditor identifies one or more critical non-compliances, the auditor is required to complete the audit certificate detailing the reasons for the critical non-compliance as well as any other major or minor non-compliances and to submit a copy of the certificate to the person who commissioned the audit and to the department within five days of completion of the audit. This requirement is detailed in section 12 of the Act.⁷

The auditor is expected to provide the department with sufficient detail on the reason(s) for non-compliance so that the Department is able to initiate follow-up action. This may be in the form of an attachment to the certificate. Each page of the attachment to the certificate should be clearly identified as being attached to the certificate.⁸

A non-compliance can result from:

1. implementation of a practice or measure that does not effectively address a risk identified in the risk management plan
2. failure to implement a practice that is contained in the risk management plan
3. failure to include a required element or identify a key risk in the risk management plan
4. failure to implement the risk management plan for all drinking water systems.

Case Study 5

A water supplier has developed a risk management plan but has failed to consider risks or risk management activities that it should have been aware of during the risk assessment of their systems.

For one supply with a contaminated source, the filtered water turbidity critical limit is 5 NTU prior to disinfection. The water supplier advised that the 5 NTU limit was based on the guideline value set out in the *'Australian Drinking Water Guidelines'* (2004). Records indicate that the filtered water turbidity was usually below 1 NTU but often spiked up to 4 NTU. The risk management plan does not identify an adequate response to turbidity of water leaving the filtration system exceeding 5 NTU, nor for turbidity spikes below 5 NTU.

Audit finding

The risk management plan does not ensure that turbidity events exceeding the critical limit will be detected or acted upon. It also does not justify why, for that contaminated catchment, a turbidity limit of 5 NTU was regarded as reasonable, given that industry best practice was usually at 0.1 or 0.3 NTU and the aesthetic context of the 5 NTU guideline value in the Guidelines. Safe drinking water is not guaranteed. The turbidity spikes mean that the supplied drinking water is highly likely to be unsafe and pose a risk to public health.

The water supplier has failed to meet the requirements of the legislation (section 9(1) of the Act and regulations 6 (1)(b) and (c)) and consequently has a critical non-compliance.

Comment: If the filtered water turbidity was usually below 0.3 NTU and the spikes were significantly less frequent, then this may have been regarded as a major non-compliance.

⁷ *Interpretation of Legislation Act 1984*, section 44: Where a period of time is expressed to begin on, or to be reckoned from, a particular day, that day shall not be included in the period (e.g. five days from Friday is Wednesday). Where the time limited by an Act falls on a day that is a holiday (Saturday, Sunday or a public holiday) the time for completion is extended to the next working day.

⁸ For example, headers on each page could read 'Attachment to Risk Management Plan Audit Certificate NN dated NNNN issued under section 12 of the *Safe Drinking Water Act 2003*'.

Case Study 6

A water supplier harvests water from an unprotected catchment, surrounded by a high level of dairy farming. The water is chloraminated, but not filtered, with no off-stream raw water storage facility. The risk management plan does not have a protocol to respond to *Cryptosporidium* detections, nor does it assess risk from stock directly accessing streams or indicate a communication strategy with catchment land stakeholders.

This water is likely to be subject to faecal contamination by *Cryptosporidium*, and the risk of endemic or epidemic cryptosporidiosis transmission has not been effectively addressed. The ‘*Australian Drinking Water Guidelines*’ (2004) recommends a multiple barrier approach to minimise the potential for transmission of protozoa, noting that treatment for this supply should include effective filtration and water storage.

Audit finding

The potential for the risk of transmission of endemic or epidemic cryptosporidiosis has been assessed as high and is likely to compromise public health if it is not rectified through the addition of adequate filtration, storage or other effective control measures. The water supplier cannot be graded as compliant with Regulations 6 (1)(b) and (c), 6 (2)(a)(i) and (b) and (c). As there is a high potential for a risk situation and that risk is likely to compromise public health, the auditor notes a critical non-compliance.

⁹ *Interpretation of Legislation Act* 1984, section 44: Where a period of time is expressed to begin on, or to be reckoned from, a particular day, that day shall not be included in the period (e.g five days from Friday is Wednesday). Where the time limited by an Act falls on a day that is a holiday (Saturday, Sunday or a public holiday) the time for completion is extended to the next working day.

¹⁰ For example, headers on each page could read ‘Attachment to Risk Management Plan Audit Certificate NN dated NNNN issued under section 12 of the *Safe Drinking Water Act* 2003’.

A **major non-compliance** is defined as a non-compliance with one or more of the auditable elements, legislative requirements or risk management activities where there is a high potential for a risk situation and that risk situation is likely to compromise public health if the non-compliance is not rectified.

In the event that the auditor identifies one or more major non-compliances, the auditor must complete the audit certificate detailing the reasons for all non-compliances (the major non-compliance as well as any other minor non-compliances) and to submit a copy of the certificate to the person who commissioned the audit and to the department within five days of completion of the audit. This requirement is detailed in section 12 of the Act.⁹

The auditor is expected to provide the department with sufficient detail on the reason(s) for non-compliance so that the department is able to initiate follow-up action. This may be in the form of an attachment to the certificate. Each page of the attachment to the certificate should be clearly identified as being attached to the certificate.¹⁰

Case Study 7

On reviewing a water supplier's risk management plan for procedures for dealing with incidents, the auditor investigated the responses to a number of detections of *Escherichia coli* in the reticulation system, both at customers taps and storage tanks. The auditor noted that this water supplier also runs dual pipe schemes in a number of new estates. Some of the *Escherichia coli* detections were from these estates, but most were not.

The auditor found that the water supplier reported all *Escherichia coli* incidents to DHS in accordance with DHS reporting protocols, which were set out in the plan, but usually responded to them as isolated incidents. The responses mainly consisted of arranging resamples, verifying that the resample results were satisfactory and checking chlorination records on the day before the detection.

The auditor observed that there was no evidence of any documented procedure in the risk management plan for addressing issues arising from incidents in the reticulation system, such as the potential for cross-connection or backflow from a customer's property, or what incidents may collectively indicate about reticulation system management in general terms. The auditor also noted that whilst managers in the water supplier were notified of most incidents, this appeared to be in an ad hoc manner outside the context of the risk management plan.

Audit finding

The auditor records a major non-compliance, due to the likelihood of contamination of the reticulation system either not being detected or not being adequately managed.

The *Escherichia coli* incident response protocols that the water supplier utilised were adequate in terms of advising DHS that an incident had occurred but were inadequate in terms of other key aspects, especially documentation of responses and analysis of risks and hazards.

Case Study 8

A water supplier manages a regulated water supply to a small rural town which has a high level of seasonal summer visitors. Untreated water is piped into residences, commercial accommodation, food premises, schools and public spaces such as playgrounds. The major public health risk associated with the supply is the inadvertent consumption of the non-drinking water.

The water supplier has a comprehensive strategy to inform residents and business proprietors of the nature of the water. However, they have not worked with the local council to ensure that all taps in publicly accessible spaces have been appropriately sign-posted. Visitors who utilise public spaces are not informed of the nature of the water.

Audit finding

The risk management plan has failed to identify a strategy to inform a significant number of transient visitors of the risks associated with the consumption of the town water. The failure to implement an effective preventive measure to inform visitors means that the water supplier has not complied with sections 6 (1)(b) and (c) of the Regulations. The omission is a major non-compliance for this element, due to the likelihood of serious risk to public health for a significant number of visitors.

Comment: Had the water supplier's risk management plan included a strategy of engagement with the local council that clearly assigned responsibility for signing the taps to the council for council owned public land, and included evidence of annual review of signs, then the finding would have been compliant. Note that the audit finding relates to the actions that are the responsibility of the water supplier (the strategy of engagement), not the council (in this case responsible for installing the taps).

A **minor non-compliance** is defined as a non-compliance with one or more of the auditable elements, legislative requirements or risk management activities where the potential impact of the non-conformance is not likely to be a serious or imminent risk to public health.

It is a matter of individual auditor judgement as to whether a finding related to how a plan is implemented is an observation, identified improvement opportunity or a minor non-compliance. This will depend on the circumstances.

Where there are multiple minor non-conformances, an auditor may decide that collectively they constitute a major non-compliance, particularly where they may result in cumulative public health risk or reflect a systemic problem in the implementation of the plan.

In the event that the auditor identifies one or more minor non-compliances, the auditor must complete the audit certificate detailing the reasons for all non-compliances (including any critical or major non-compliances) and to submit a copy of the certificate to the person who commissioned the audit and to the department within five days of completion of the audit. This requirement is detailed in section 12 of the Act.¹¹

The auditor is expected to provide the department with sufficient detail on the reason(s) for non-compliance so that the department is able to initiate follow-up action. This may be in the form of an attachment to the certificate. Each page of the attachment to the certificate should be clearly identified as being attached to the certificate.¹²

Case Study 9

A water supplier's risk management plan includes a monitoring program that provides information about risks to human health arising from pathogenic micro-organisms and a number of inorganic chemicals. The monitoring program and risk assessments do not address radiological parameters and a range of organic chemicals including pesticides. The water supplier explains that these parameters are historically not a problem in their catchment, so do not need to be considered in the risk management plan.

Audit finding

The risk management plan has not addressed risks arising from radiological parameters and a range of organic chemicals including pesticides, as required by regulation 6 (2)(a)(iii) and (iv). There is no evidence that these risks have been addressed and no evidence of the water supplier's decision making process in relation to radiological parameters and pesticides recorded in the risk management plan.

If, in the auditor's view, the lack of risk management relevant to these parameters may have posed a public health risk in that drinking water supply, the auditor must record a major non-compliance. If in the auditor's view the lack of risk management relevant to these parameters was unlikely to have posed a risk to public health in that drinking water supply, the auditor may record a minor non-compliance.

Comment: In order to be found compliant, the risk management plan must reference all matters listed in regulation 6 (2)(a). In the above case, the decision not to monitor for radiological parameters or pesticides may have been justified, but the decision making process made by the water supplier and its justification must be recorded in the plan, along with a process for reviewing that decision. The non compliance was based on the failure to record the risk management process, not whether (in this case) radiological parameters or pesticides were monitored.

¹¹ *Interpretation of Legislation Act 1984*, section 44: Where a period of time is expressed to begin on, or to be reckoned from, a particular day, that day shall not be included in the period (e.g. five days from Friday is Wednesday). Where the time limited by an Act falls on a day that is a holiday (Saturday, Sunday or a public holiday) the time for completion is extended to the next working day.

¹² For example, headers on each page could read 'Attachment to Risk Management Plan Audit Certificate NN dated NNNN issued under section 12 of the *Safe Drinking Water Act 2003*'.

Case Study 10

Water supplier A's risk management plan for regulated water supplies references regulation 6 (2)(a), (b) and (c), by considering each group of risks listed and noting the comprehensive risk management processes and information management processes they have put in place to ensure that the water can not be consumed. They do not routinely monitor their regulated water supplies for these parameters but have historical data and a process for ensuring that any major changes in raw water quality are detected.

Water supplier B's risk management plan for regulated water does not reference regulation 6 (2) in any way. They do not routinely monitor their regulated water supplies for these parameters and do not have a process for ensuring that any major changes in raw water quality are detected. Both water supplier A and B's regulated water signs are adequately signed.

Audit finding

Water supplier A would be found to be compliant in this element, with perhaps an identified improvement opportunity depending on the details of these systems. Water supplier B would be found to have a minor non-compliance. This is because the legislative requirements were not met but there did not appear to be any identifiable public health risk as the risk was otherwise addressed through signage etc.

Comment: In order to be found compliant, water supplier B's decision making process and its justification must be recorded in the plan, along with a process for reviewing that decision. Refer also to case study 8.

Case Study 11

A water storage manager supplies untreated water, from a reservoir and river that it manages, to a water supplier. There is no agreed standard of quality at the point of supply. The water supplier then treats this water to a standard suitable for drinking. The water storage manager's risk management plan in relation to this supply identifies in general terms the risks to the downstream water supplier arising from this water and is framed in the context of the downstream water supplier's water treatment capabilities and system layouts (i.e where the water goes and how the water supplier treats it).

The water storage manager tests the water in its reservoirs and rivers for algal blooms, permits the water supplier to test for other parameters and advises the water supplier to monitor the water it receives to manage any identified risks. The water storage manager has also implemented a protocol, agreed to by the water supplier, setting out the incidents or events which will trigger a notification to the water supplier. There is a schedule of meetings between the water storage manager and water supplier set out in the plan but there does not appear to be evidence of exchange of information.

Case Study 11 (cont.)

Audit finding

The water storage manager’s risk management plan is found to be compliant, provided all the risks identified in regulation 6 (2) are assessed. In relation to its implementation, the lack of evidence of exchange of information may be a minor non-compliance if it was found to be caused by the water storage manager not implementing an activity set out in its plan, or an observation or identified improvement opportunity if it did not affect a legislative obligation.

Comment: In this case the water storage manager is not required to verify that the water supplier has established specific risk management strategies or interventions downstream of the point of supply to the water supplier. However, the water storage manager in this case is responsible for advising the water supplier that there are risks.

Please note that regulation 6 (1)(d) specifically applies to water suppliers, not water storage managers.

Case Study 12

A water supplier’s risk management plan includes a procedure for the chlorination of water mains after repairs for a main break. This procedure stated that chlorination must occur after a main break had been repaired, but this was not being done because of industry consensus that this was unnecessary. The maintenance records also indicated that the chlorination was not occurring after the repairs.

Audit finding

As the action that was set out in the risk management plan was not being implemented, but this did not appear to significantly pose a risk to public health, the auditor records a minor non-compliance. Had the auditor found that there were circumstances where the failure to chlorinate after mains break repairs may have posed a risk to public health across the water supplier’s systems, the auditor would record a major non-compliance.

Comment: Whether or not mains are chlorinated after breaks is a matter for individual water businesses to decide, in light of wider water industry practice. Whatever decision is made, the plan and current work practice need to align and water businesses need to be able to justify their risk management activities after a mains break, especially if these activities appear not to align with those of the industry generally. To be found compliant, the water supplier would have needed to follow the procedure set out in its risk management plan and also justified why this was a suitable procedure that protected public health.

Table 2: Summary of compliance grades and auditor actions

Compliance Grade	Features	Auditor Actions	Indicative DHS Response
Compliant result			
Compliant	Sufficient evidence to confirm that the business has undertaken, prepared and/or implemented all actions in accordance with the legislation and their risk management plan.	Complete compliant certificate for water business. Submit certificate to DHS within 14 days.	No specific action.
Compliant with identified improvement opportunities or observations	As above, but the auditor’s report has made a number of observations and identified some improvement opportunities.	Complete compliant certificate for water business. Submit certificate to DHS within 14 days.	DHS notes the identified improvement opportunities and observations and requests that the water business advise what actions it intends to take in this regard.
Non-compliant result			
Most significant finding is a critical non-compliance	Non-compliance where a serious or imminent risk to public health is identified.	Complete non-compliant certificate for water business, with details. Submit certificate to DHS within 5 days.	DHS to meet with water business within seven days of receiving the audit certificate to discuss and agree on an action plan to address non-compliances.
Most significant finding is a major non-compliance	Non-compliance where there is a high potential for a risk situation, likely to compromise public health if the non-compliance is not rectified.	Complete non-compliant certificate for water business, with details. Submit certificate to DHS within 5 days.	DHS aim to contact and where possible meet with water business within fourteen days of receiving the audit certificate to discuss and agree on action plan to address non-compliances.
Most significant finding is a minor non-compliance	Non-compliance where there is a low potential for a risk situation, and the potential impact of the non-compliance is not likely to be a serious or imminent risk to public health that (i.e. it would not warrant a ‘critical’ or ‘major’ non-compliance outcome).	Complete non-compliant certificate for water business, with details. Submit certificate to DHS within 5 days.	DHS aim to contact water business within fourteen days of receiving the audit certificate to discuss and agree on action plan to address non-compliances.

Audit certificates

Preparing the audit certificate

In accordance with section 12 of the Act, auditors are required to provide the person that commissioned the audit with a certificate after completion of the audit.

The audit certificate must be in the form prescribed in Schedule 1 of the Regulations. A template for the certificate is shown in Appendix 3 and can be downloaded from: www.health.vic.gov.au/environment/water/drinking.htm.

The completed audit certificate, signed, dated and with all items filled out, may be attached to or incorporated as an appendix into other documents, such as letters or an audit report, provided it is identifiable as a stand alone item. The certificate will state whether the water supplier or water storage manager being audited has or has not complied with the legislative obligations.

For a compliant result, identified improvement opportunities should be referenced in the audit report but must not be listed or referenced on the certificate. For a non-compliant result, details of reasons for non-compliance (including identifying whether individual non-compliances are critical, major or minor) that are extensive and would not fit on the page, should be placed on attached pages, with a heading clearly linking the attached pages to the certificate. Any attached pages with these details become in law part of the audit certificate.

Where an auditor recommends corrective action for non-compliances, the recommendations should be succinct, high level and outcome focussed, but can be more pointed and specific if the auditor has uncovered potential risks to public health (e.g in the event of a critical non-conformance being discovered). The recommendations can include implied priorities but are not intended to be a detailed separate piece of work. The recommendations should be no more than a few lines per item.

The audit certificate may be prepared on paper with a corporate logo or letterhead, provided the logo or letterhead does not obscure any of the required text. Please note that the auditor, the natural person who has signed it, is the issuer of the audit certificate, regardless of any corporate logo, statement or letterhead.

The person who commissioned the audit will usually be the person at the water supplier or water storage manager who submitted the auditor application to the department, but may be another person nominated by the water supplier or water storage manager. Please note that an address is also required. The Certificate Number is the number of the Auditor Approval Notice issued by the department that is relevant to this audit.

Certificates may be cited as the 'audit certificate issued under section 12 (1) of the *Safe Drinking Water Act 2003*'.

Submitting the audit certificate

Auditors must lodge audit certificates with the department for all audits carried out in accordance with the Act. The time requirements are:

- within 5 days of completion of an audit for a non-compliant outcome
- within 14 days of completion of an audit for a compliant outcome

The original of the audit certificate, once completed, signed, dated and including any attachment outlining reasons for non-compliance, should be provided to the Person Who Commissioned the Audit, pursuant to section 12 (1) of the Act, with a copy to the Department of Human Services and a copy retained by the auditor.

Auditors may submit the copy for the Department of Human Services either by mail as a hard copy to:

**Assistant Director Environmental Health
Department of Human Services
GPO Box 4057
Melbourne VIC 3001**

... or by fax, addressed similarly, to 1300 761 874; or by email, with the certificate as a PDF attachment, to dwru@dhs.vic.gov.au, so as to arrive by the required time.

Auditors may submit the certificate by fax or email so as to arrive within the five or fourteen day time frame, then send a follow-up hard copy later in the mail. Auditors are requested not to submit the audit certificate as a Word document.

Please note that the five day time frame for auditors to submit a non-compliant audit certificate to the department is a strict deadline that is established in section 12 (3) the Act – time extensions are not possible.

The department will acknowledge receipt of all incoming audit certificates.

Further information

For further information on any aspect of drinking water risk management plan audits please email dwru@dhs.vic.gov.au or contact your business liaison officer with the Drinking Water Regulatory Section of the department.

Guidance documents, forms, newsletters and reports outlining the results of the 2008 round of audits can be downloaded from the department's drinking water web site at:

www.health.vic.gov.au/environment/water/drinking

Appendix 1: Relevant sections of the *Safe Drinking Water Act 2003*

7. Water suppliers must prepare, implement and review risk management plans

- (1) A water supplier must–
 - (a) prepare a risk management plan in relation to its supply of drinking water and regulated water to the public; and
 - (b) implement the plan and comply with any requirements set out in the plan; and
 - (c) keep the plan under continuous review with a view to updating and improving it; and
 - (d) revise any aspect of the plan that is found, on review, to need revision.

8. Water storage managers must prepare, implement and review risk management plans

- (1) A water storage manager must–
 - (a) prepare a risk management plan in relation to its supply of water to a water supplier; and
 - (b) implement the plan and comply with any requirements set out in the plan; and
 - (c) keep the plan under continuous review with a view to updating and improving it; and
 - (d) revise any aspect of the plan that is found, on review, to need revision.

9. Risk management plan

- (1) A risk management plan in relation to the supply of water is a document–
 - (a) that contains a detailed description of the system of supply; and
 - (b) that identifies the risks to the quality of the water and the risks that may be posed by the quality of the water; and
 - (c) that assesses those risks; and
 - (d) that sets out the steps to be taken to manage those risks (including the development and implementation of preventative strategies); and
 - (e) that contains any other matters required by the regulations.
- (2) A risk management plan must address any risks specified in the regulations.
- (3) A risk management plan does not need to identify, or to make any provision in respect of, any risk in respect of which provision is required to be made in a risk management plan under section 31 of the **Terrorism (Community Protection) Act 2003**.

10 Risk management plan audit

- (1) A risk management plan audit is an audit by an approved auditor in relation to the risk management plan to determine–
 - (a) whether, in the case of a water supplier, the water supplier has complied with the obligations imposed by section 7(1) during the audit period;

- (b) whether, in the case of a water storage manager, the water storage manager has complied with the obligations imposed by section 8(1) during the audit period.
- (2) In conducting a risk management plan audit, the auditor must inspect all the documents that are specified by the regulations for the purposes of this section.

11. Secretary may require risk management plan audit

- (1) The Secretary may, by written notice given to a water supplier or water storage manager–
 - (a) require the water supplier or water storage manager to have its risk management plan audited in respect of a specified audit period by an approved auditor by the date specified in the notice; or
 - (b) declare when, how often and in respect of what audit period the water supplier or water storage manager is to have its risk management plan audited by an approved auditor.
- (2) A water supplier or water storage manager must comply with any requirement made in the notice and must do so at its own expense.

12. Audit certificate to be given

- (1) After conducting a risk management plan audit, an approved auditor must give the person who commissioned the audit a certificate stating the auditor’s opinion on–
 - (a) whether, in the case of a water supplier, the water supplier has complied with the obligations imposed by section 7(1) during the audit period;
 - (b) whether, in the case of a water storage manager, the water storage manager has complied with the obligations imposed by section 8(1) during the audit period.
- (2) The certificate must be in the form, and contain the details, required by the regulations.
- (3) If the auditor is of the opinion that section 7(1) or 8(1) has not been complied with during the audit period, he or she must also give a copy of the certificate to the Secretary within 5 days after completing the audit.

Penalty: 60 penalty units.

- (4) If the auditor is of the opinion described in sub-section (3), he or she must include in the certificate details of the reasons why he or she is of that opinion.

13. Approval of risk management plan auditors

- (1) On the application of a water supplier or water storage manager, the Secretary may approve a natural person to conduct risk management plan audits of the supplier’s or manager’s risk management plan.
- (2) The Secretary may only approve a person as an auditor if the Secretary is satisfied that the person meets the auditor approval criteria set out in the regulations for the purposes of this section.

- (3) If the Secretary approves a person as an auditor, the Secretary must give the person, and the water supplier or water storage manager who applied for the approval, written notice of the approval.
- (4) In approving a person as an auditor, the Secretary–
 - (a) may impose any conditions on the approval that the Secretary considers to be appropriate; and
 - (b) may specify for how long the approval remains current.

14. Only approved auditors may conduct audits

A person must not conduct a risk management plan audit or issue a certificate in relation to such an audit unless he or she is an approved auditor.

Penalty: 60 penalty units.

15. Auditor must comply with conditions of approval

An approved auditor must comply with any condition imposed by the Secretary in approving him or her to be an auditor.

Penalty: 60 penalty units.

16. Conflict of interest to be avoided

A person must not conduct an audit of a risk management plan that he or she has written or assisted in preparing.

Penalty: 60 penalty units.

Appendix 2: Relevant sections of the Safe Drinking Water Regulations 2005

6. Risk management plan

- (1) For the purposes of section 9(1)(e) of the Act, a risk management plan must contain the following matters–
 - (a) the names and contact details of, and the positions held by, the persons responsible for managing hazards and risks to the quality of the water identified in the risk management plan; and
 - (b) details of the activities undertaken, and measures taken, to manage hazards and risks to the quality of the water identified in the risk management plan, including the method by which the effectiveness of these activities and measures is verified; and
 - (c) details of the features of the system of supply designed to assist in the management of risks to the quality of the water identified in the risk management plan, including the method by which the effectiveness of these features is verified; and
 - (d) in the case of a water supplier, details of the procedures for consultation with water storage managers and other water suppliers for the purpose of achieving agreement on the hazards and risks to quality of the water supplied–
 - (i) to the water supplier by water storage managers or other water suppliers; and
 - (ii) by the water supplier to other water suppliers; and
 - (e) details of procedures and management systems for–
 - (i) ensuring that the amount and purity of chemicals added to drinking water does not adversely affect the quality of that water or pose a risk to human health; and
 - (ii) controlling any residue or chemical by-products imparted to drinking water as a result of the addition of chemicals to water supplied for drinking purposes; and
 - (f) details of emergency management arrangements and procedures for dealing with an incident, event or emergency that may adversely affect the quality or safety of drinking water, or result in water being supplied that poses a risk to human health, including–
 - (i) the names and contact details of, and the positions held by, the persons responsible for dealing with such an incident, event or emergency; and
 - (ii) methods for communicating or disseminating information to the public in relation to any such incident, event or emergency.
- (2) For the purposes of section 9(2) of the Act, a risk management plan must address the following risks–
 - (a) the risk to human health that arises from the presence in water of–
 - (i) pathogenic micro-organisms; and
 - (ii) inorganic chemicals, including inorganic disinfection by-products; and

- (iii) organic chemicals, including pesticides, pesticide residues and organic disinfection by-products; and
 - (iv) radiological parameters; and
 - (v) algal toxins; and
- (b) the risks arising from an incident or event that may cause the organisms, substances and matters referred to in paragraph (a) to enter or be present in the system of supply of the water supplier or the water supplied by the water storage manager (as the case requires); and
- (c) the risk of transfer of the organisms, substances and matters referred to in paragraph (a) in water being supplied by the water supplier or water storage manager (as the case requires).

7. Risk management plan audits

For the purposes of section 10(2) of the Act, the specified documents are—

- (a) the risk management plan; and
- (b) any document or operating manual, procedure or protocol created pursuant to the risk management plan or containing material relating to the content of the risk management plan; and
- (c) any training and competency manual relating to the responsibilities of the staff of the water supplier or water storage manager (as the case requires) to manage and deal with—
 - (i) risks identified in the risk management plan; and
 - (ii) emergencies, incidents or events that may adversely affect the quality of—
 - (A) in the case of a water supplier, drinking water;
 - (B) in the case of a water storage manager, the water supplied or to be supplied.

8. Audit certificate

For the purposes of section 12(2) of the Act, a risk management plan audit certificate must be in the form of Schedule 1.

9. Approval of risk management plan auditors

- (1) For the purposes of section 13(2) of the Act, the auditor approval criteria are that the applicant for approval—
- (a) holds an accreditation by an institution which, in the opinion of the Secretary, makes the applicant suitable for approval as a risk management plan auditor; or
 - (b) demonstrates to the Secretary that he or she has the experience, qualifications and skills necessary to independently conduct audits of risk management plans.
- (2) In addition, the applicant for approval must provide to the Secretary a written declaration that he or she has no conflict of interest that would impinge on their ability to objectively conduct an audit of a risk management plan.



Appendix 3: Risk Management Plan Audit Certificate

SCHEDULE 1

Regulation 8

Safe Drinking Water Regulations 2005

Risk Management Plan Audit Certificate

Certificate Number:
(insert a number to specifically identify this certificate from any other audit certificate issued by the approved auditor)

Audit period:
(insert period of audit relevant to this certificate)

To: _____
(insert full name and address of person who commissioned the audit)

Australian Business Number (ABN):
(insert the business number of the water supplier or water storage manager)

I, _____, after conducting a risk management plan audit of the
(print full name of approved auditor)

water supplied by, _____, am of the opinion that—
(insert name of the water supplier or water storage manager)

(insert name of water supplier) *has/has not complied with the obligations

imposed by section 7(1) of the **Safe Drinking Water Act 2003** during the audit period.

(insert name of water storage manager) *has/has not complied with the obligations

imposed by section 8(1) of the **Safe Drinking Water Act 2003** during the audit period.

*The details of the reasons for non-compliance are—

*insert/attach the details of the reasons for non-compliance

Signature of approved auditor: _____ Date:/...../.....

* Delete if not applicable.
 Additional pages or reports can be attached to this certificate.

Appendix 4: Auditor application

Information requested in this form is collected under the authority of the *Safe Drinking Water Act 2003* section 13.

This information will be used to evaluate prospective auditor applications.

Please refer to the guidance note for information relating to the completion of this application. Applicants must ensure that the information provided is accurate and that it addresses all the requirements set out in the guidance note. The Department of Human Services will handle all information in accordance with privacy legislation.

Water Supplier/Water Storage Manager Information

Name: _____

Position: _____

Business Name: _____

Address: _____

City: _____ Postcode: _____

Email address: _____

Telephone: _____ Fax: _____

Prospective auditor information

Name: _____

Position: _____

Company: _____

Address: _____

City: _____ Postcode: _____

Email address: _____

Telephone: _____ Fax: _____

Prospective auditor’s referees*

Name	Association with auditor	Contact details

Areas where prospective auditors will seek additional technical support

Technical discipline	Organisation/individual to provide support/expertise*	Skills/Experience (Brief)*

*can be included as an attachment

Check List

Please ensure the following are attached:

- Applicant current CV, including audit log*
- Applicant RABQSA auditor certification*
- Applicant conflict of interest declaration

* These items are not required if the prospective auditor has been approved by the department as an auditor for a previous audit.

Further information (optional)

Request by water supplier/water storage manager

I _____ of _____ request the approval of
(insert name) (insert name of water supplier/water storage manager)

_____ to audit my risk management plan under the *Safe Drinking Water Act 2003*.
(insert name of auditor)

Signature: _____ Date:/...../.....

Please forward this completed application and attachments to:

Assistant Director, Environmental Health
Department of Human Services
GPO Box 4057
Melbourne VIC 3001
Fax: (03) 9096 9182

Appendix 5: Conflict of interest declaration – Application for approval as DHS auditor

Name in full: _____

Postal address: _____

City: _____ Postcode: _____

Telephone Nos Private: _____ Business: _____

Fax: _____ Mobile: _____

Email address: _____

Business name: _____

Declaration:

I, _____ of _____ declare that:

- I do not have any personal bias or inclination which would in any way affect my decisions in relation to the water business being audited.
- I do not have any personal obligation, allegiance or loyalty which would in any way affect my decisions in relation to the water business being audited.
- I did not prepare, implement, review or revise the water business' risk management plan in relation to the supply of water.
- I have not been employed by the water business being audited in the previous two years.
- No person assisting me in the audit process has any conflict of interest.

except as set out below:

(List potential conflicts, including the contract work you and or your employer has performed for the Subject in the previous two years)

I undertake to make a further declaration detailing any conflict, potential conflict or apparent conflict that may arise during the contract period. Should any conflict appear to compromise me, I agree to abstain from any related decision.

Signed: _____ Date:/...../.....

Witness

Name: _____

Signature: _____ Date:/...../.....

Appendix 6: Table of auditable elements

Auditable element	Legislative reference	Notes ^{13, 14, 15}	ADWG Framework for Drinking Water Quality Reference Element/Component/Action
Risk management activities			
Risk management plan prepared	SDWA 7(1)(a) 8(1)(a)	<p>The risk management plan must exist, and should be familiar and accessible to all relevant staff. The plan must include those elements, and those risks detailed in section 9 of the Act and regulations 6 and 7.</p> <p>For water suppliers the plan must also include any regulated water supplies.</p> <p>Features of a water business that support a risk management plan might include organisational policy, risk management committees and adequate resources.</p>	E10 C1 A1 E10 C1 A2
Identification of risk	SDWA 9(1)(b)	<p>Based on the system description and auditor knowledge, the auditor can determine the general sorts of risks that could reasonably be expected to be addressed by the risk management plan.</p> <p>The plan must also include the risks that must be considered under regulation 6(2) of the Safe Drinking Water Regulations 2005.</p> <p>The auditor should sight evidence that a recognised approach or framework has been applied to identify the risks to the system.</p>	E2 C2 A2 E2 C2 A3 E2 C3 A1 E2 C3 A2
Risk assessment	SDWA 9(1)(c)	<p>Risk assessment should be undertaken by means of a recognised process or framework such as a ‘consequence and likelihood’ model or by use of risk management principles.</p> <p>A justifiable process, such as the use of technical information or operational data should be used to assign identified risks into categories, based on their likelihood and potential impact.</p>	E2 C3 A1 E2 C3 A2 E2 C3 A3 E2 C3 A4 E2 C3 A5
Development and implementation of preventative strategies (including appropriate control and monitoring measures)	SDWA 9(1)(d)	<p>The auditor should see evidence that appropriate and effective preventive measures have been put in place to manage identified risks.</p> <p>The auditor should also be able to assess if the measures in the plan would not effectively manage the identified risks.</p>	E3 C1 A1 E4 C3 A1 E3 C2 A1 E4 C4 A1 E3 C2 A2 E3 C2 A3
Implementation and compliance with the requirements of the risk management plan	SDWA 7(1)(b) 8(1)(b)	The plan must be implemented in its entirety, and time components must be adhered to or met.	E4 C2 A2 E10 C1 A1 E10 C1 A2
Continuous review, update and improvement of risk management plan	SDWA 7(1)(c) 8(1)(c)	The business should be committed to on-going review and revision of the risk management plan to ensure the plan remains relevant to the system and to measure progress against the risk management plan.	E1 C2 A3 E6 C2 A1 E1 C3 A3 E6 C2 A3 E2 C3 A6 E9 C2 A2 E3 C1 A2 E10 C1 A2 E4 C3 A1 E10 C1 A1 E6 C1 A1 E10 C1 A4

¹³ Standards Australia and Standards New Zealand. AS/NZS 4360:2004 Risk Management Standards. August 2004.

¹⁴ The CRC for Water Quality and Treatment. A Guide to Hazard Identification & Risk Assessment for Drinking Water Supplies. A Research Report. April, 2004.

¹⁵ Standards Australia and Standards New Zealand. Risk Management Guidelines Companion to AS/NZS 4360:2004. August 2004.

Auditable element	Legislative reference	Notes ^{13, 14, 15}	ADWG Framework for Drinking Water Quality Reference Element/ Component/Action
Revision of risk management plan	SDWA 7(1)(d) 8(1)(d)	<p>The auditor should sight evidence that the plan is reviewed and updated (if required) in response to the review when there has been a challenge such as an incident or emergency or a change to the system.</p> <p>This might include a feed-back mechanism, a risk or issues register or a system that tracks changes to the plan.</p> <p>The auditor should sight evidence of this organisational commitment such as a revision and review policy, a set of performance targets in the business plan or minutes and actions arising from the review process.</p>	E2 C3 A6 E3 C1 A2 E4 C3 A1 E6 C2 A3 E9 C2 A2 E10 C1 A1 E10 C1 A2 E10 C1 A4
Risk management plan (contents)			
Detailed description of supply	SDWA 9(1)(a)	<p>The description of the supply provides the basis for hazard identification and risk analysis. The description of the supply in the risk management plan can be in any form that the water supplier/water storage manager chooses. It should encompass catchment to customer tap for a water supplier, and catchment to point of supply to the water supplier for a water storage manager.</p> <p>Detail must be comprehensive enough to develop a basic understanding of the supply (such as flora and fauna, human activity, chemicals used, design features), to facilitate effective hazard identification and risk analysis and risk of the supply, and to enable staff to manage any emergency or incident that arises in relation that part of the supply.</p>	E2 C1 A2 E2 C1 A3
The names and contact details of, and the positions held by, the persons responsible for managing hazards and risks to the quality of the water identified in the risk management plan.	Regulation 6(1)(a)	The risk management plan must identify the individuals who are responsible for managing the risks identified by the plan. How the organisation deals with risk to the water quality across the whole organisation is important, as well as the identification of the person with responsibility for risk or quality management.	E1 C2 A2 E4 C3 A1 E5 C4 A1 E5 C4 A2
Details of the activities undertaken, and measures taken, to manage hazards and risks to the quality of the water identified in the risk management plan, including the method by which the effectiveness of these activities and measures is verified.	Regulation 6(1)(b)	<p>The comments that apply to section 9 of the Act are relevant to this section, in particular those relating to 9(1)(d).</p> <p>This regulation requires the risk management plan to include measures to verify the preventive actions in the risk management plan to ensure that they are both effective and appropriate.</p> <p>The auditor can use their knowledge and judgement and the details of the risk management plan to determine if the activities/measures and the verification measures are appropriate.</p>	E3 C1 A1 E3 C1 A2 E3 C2 A2 E4 C1 A1 E4 C2 A1 E4 C3 A1 E4 C4 A1 E4 C4 A2 E9 C2 A1 E9 C2 A2 E9 C3 A1
Details of the features of the system of supply designed to assist in the management of risks to the quality of the water identified in the risk management plan, including the method by which the effectiveness of these features is verified.	Regulation 6(1)(c)	Based on the details of the features of the system in the risk management plan and their knowledge of risks to water quality, the auditor will need to determine if the system is effective for management of the identified risks, and if the verification measures are appropriate.	E2 C1 A3 E3 C2 A1 E3 C2 A3 E4 C2 A1 E4 C4 A2 E9 C2 A1 E9 C2 A2

Auditable element	Legislative reference	Notes ^{13, 14, 15}	ADWG Framework for Drinking Water Quality Reference Element/Component/Action
<p>In the case of a water supplier, details of the procedures for consultation with water storage managers and other water suppliers for the purpose of achieving agreement on the hazards and risks to quality of the water supplied–</p> <p>(i) to the water supplier by water storage managers or other water suppliers; and</p> <p>(ii) by the water supplier to other water suppliers.</p>	<p>Regulation 6(1)(d)(i) 6(1)(d)(ii)</p>	<p>The water supplier must be able to provide evidence of formal communication protocols and agreements that detail the arrangements for information transfer, consultation and other communication with relevant water storage manager.</p> <p>Minutes, documented outcomes and communications should be available as evidence.</p> <p>Note – this auditable element only applies to risk management plans of water suppliers.</p>	<p>E1 C3 A2 E1 C3 A3 E4 C2 A1 E4 C5 A2 (6(1)(d)(i) only E1 C3 A1</p>
<p>Details of procedures and management systems for–</p> <p>(i) ensuring that the amount and purity of chemicals added to drinking water does not adversely affect the quality of that water or pose a risk to human health; and</p> <p>(ii) controlling any residue or chemical by-products imparted to drinking water as a result of the addition of chemicals to water supplied for drinking purposes.</p>	<p>Regulation 6(1)(e)(i) 6(1)(e)(ii)</p>	<p>The water business must have a procedure or process in place that allows them to be confident that the chemicals added to the drinking water supply are safe. A quality assurance program to verify the quality of chemicals can be administered by a chemical supplier or third party, with the water business holding the evidence.</p> <p>The control of the chemical residues and by-products at a safe level should be managed through the activities, supply features and associated verification measures described in the risk management process.</p> <p>Note – risks arising from pesticides, herbicides or other chemicals in raw water or applied to land or channel banks adjacent to raw water, are covered under regulation 6 (2)(a).</p>	<p>E4 C4 A1 E4 C5 A1 6(1)(e)(i) only E4 C5 A2 6(1)(e)(i) only</p>
<p>Details of emergency management arrangements and procedures for dealing with an incident, event or emergency that may adversely affect the quality or safety of drinking water, or result in water being supplied that poses a risk to human health, including–</p> <p>(i) the names and contact details of, and the positions held by, the persons responsible for dealing with such an incident, event or emergency; and</p> <p>(ii) methods for communicating or disseminating information to the public in relation to any such incident, event or emergency.</p>	<p>Regulation 6(1)(f)</p>	<p>The water business will need to have in place emergency management procedures for an event, incident or emergency, and these procedures will need to have the content required by regulation 6(1)(f).</p> <p>The context of regulation 6(1)(f) is the need for procedures to be in place to deal with emergencies, incidents or events, but the auditor may wish to inspect a selection of recorded incidents/events/emergencies and determine, where possible, whether the documented procedures were followed.</p> <p>Of particular note will be the process used for communicating or disseminating information to the public in relation to any such incident, event or emergency.</p> <p>If the debrief meeting for a particular incident/event/emergency identifies that the procedure requires modification, then there is expectation that the procedure will have been modified, as is required in section 7(1)(d) of the Act.</p>	<p>E4 C2 A1 E4 C3 A1 E4 C3 A2 E5 C4 A2 E5 C4 A1 E6 C1 A1 E6 C1 A2 E6 C2 A1 E6 C2 A2 E6 C2 A3</p>

Auditable element	Legislative reference	Notes ^{13, 14, 15}	ADWG Framework for Drinking Water Quality Reference Element/ Component/Action
Risks			
<p>(a) the risk to human health that arises from the presence in water of–</p> <ul style="list-style-type: none"> (i) pathogenic micro-organisms; and (ii) inorganic chemicals, including inorganic disinfection by-products; and (iii) organic chemicals, including pesticides, pesticide residues and organic disinfection by-products; and (iv) radiological parameters; and (v) algal toxins. 	Regulation 6(2)(a)(i) 6(2)(a)(ii) 6(2)(a)(iii) 6(2)(a)(iv) 6(2)(a)(v)	<p>The evidence that the auditor will need to see will be that the hazards identified in regulations 6(2)(a) were addressed in the risk assessment required under section 9(1)(c) of the Act, and that appropriate preventive measures were put in place to address these risks, as is required by section 9(1)(d) of the Act.</p> <p>Note – refer also to case study 9.</p>	E2 C3 A2 E2 C3 A3
<p>(b) The risks arising from an incident or event that may cause the organisms, substances and matters referred to in paragraph (a) to enter or be present in the system of supply of the water supplier or the water supplied by the water storage manager (as the case requires).</p> <p>(c) The risk of transfer of the organisms, substances and matters referred to in paragraph (a) in water being supplied by the water supplier or water storage manager (as the case requires).</p>	Regulation 6(2)(b) 6(2)(c)	<p>The evidence that the auditor will need to see will be that the hazardous events identified in regulations 6(2)(b) and 6(2)(c) were addressed in the risk assessment required under section 9(1)(c) of the Act, and that appropriate preventive measures were put in place to address these risks, as is required by section 9(1)(d) of the Act.</p>	E2 C3 A2 E2 C3 A3
Documentation			
The risk management plan	Regulation 7(a)	<p>The auditor will need to view and assess all documents that relate to the risk management process. A water business can title, refer to or link these documents in any manner that they wish, but during the audit, all required documentation must be available for inspection.</p> <p>Regulation 7(a) refers to the document described in section 9 of the Act, and it must contain the details and assessments required by section 9 and regulation 6.</p>	E10 C1 A1 E10 C1 A2

Auditable element	Legislative reference	Notes ^{13, 14, 15}	ADWG Framework for Drinking Water Quality Reference Element/ Component/Action
Any document or operating manual, procedure or protocol created pursuant to the risk management plan or containing material relating to the content of the risk management plan.	Regulation 7(b)	<p>Regulation 7(b) refers to supporting documentation.</p> <p>These documents are described as being operating manuals, procedures or protocols. It is likely that these will be the documents that contain the preventative strategies/measures required under section 9(1)(d) of the Act. The auditor will be required to view these documents, and ensure that if they contain preventative strategies/measures that they are appropriate to manage the identified risks.</p> <p>Additionally, if these operating manuals, procedures or protocols detail actions that are to be implemented, or they refer to actions that are to be undertaken under certain circumstances, then evidence must be available that the required actions are being taken.</p>	E4 C1 A2 E4 C2 A2 E10 C1 A1 E10 C1 A2
<p>Any training and competency manual relating to the responsibilities of the staff of the water supplier or water storage manager (as the case requires) to manage and deal with–</p> <p>(ii) risks identified in the risk management plan; and</p> <p>(ii) emergencies, incidents or events that may adversely affect the quality of–</p> <p>(A) in the case of a water supplier, drinking water;</p> <p>(B) in the case of a water storage manager, the water supplied or to be supplied.</p>	Regulation 7(c)(i) 7(c)(ii)(A) 7(c)(ii)(B)	Regulation 7 (c) deals with training. There is an expectation that training and/or competency manuals will be in place. As detailed in regulation 7(c)(i) & 7(c)(ii), the information in the training/competency manual must relate or be relevant to the operating manuals, procedures or protocols detailed in regulation 7(b) (i.e. the risks identified in the plan), or emergency management.	E7 C2 A3 (7(c)(i) only) E10 C1 A1 E10 C1 A2

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