

Safe Drinking Water Act 2003 risk management plan regulatory audit

Guidance information

To receive this publication in an accessible format phone 1300 761 874 using the National Relay Service 13 36 77 if required, or email <dwru@dhhs.vic.gov.au>.

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Introduction

The key objective of Victoria's safe drinking water regulatory framework is to protect public health through providing safe, good-quality drinking water. The framework incorporates a catchment-to-tap approach to managing risk associated with drinking water supplies. This risk-based approach to drinking water quality promotes preventive and proactive, rather than reactive, management of drinking water quality, and is fully aligned with the approach used in the *Australian drinking water guidelines*.¹

Victoria's *Safe Drinking Water Act 2003* ('the Act') requires water suppliers and water storage managers (collectively referred to as water agencies) to prepare, implement, review and revise their risk management plans in relation to the supply of drinking water and regulated water to the public. Section 9 of the Act states information regarding risk management plans. In short, the risk management plan is a document that:

- contains a detailed description of the water supply systems
- identifies and assesses risks to the quality of the water and risks posed by the quality water, and assesses those risks
- sets out the steps taken to manage the risks
- contains matters as required by the Safe Drinking Water Regulations 2015 ('the regulations').

Section 11 of the Act empowers the Secretary to the Department of Health and Human Services ('the department') to request that water suppliers and water storage managers have their risk management plan audited by a specified date.

This audit is conducted by a department-approved, suitably qualified independent expert, ensuring there is no conflict of interest associated with the auditing arrangements, and assisting in retaining community confidence in Victoria's drinking water supplies.

The primary purpose of the audit is to determine compliance with the legislative risk management plan requirements. However, the department also believes that the audit process drives continuous improvement and best practices, reinforcing and promoting the risk management principles of Victoria's water industry.

About this document

This document aims to assist auditors in understanding the risk management plan audit requirements under the Act. This guidance includes:

- information regarding the risk management plan audit process for all stakeholders
- the auditor certification and approval process
- information to assist auditors' consistent assessment and reporting of compliance outcomes
- risk management plan requirements relating to key areas of assessment.

Appendix 1 contains a summary of amendments to this guidance since the previous version was published.

¹ NHMRC, NRMCMC 2011, *Australian drinking water guidelines paper 6 National water quality management strategy*, National Health and Medical Research Council, National Resource Management Ministerial Council, Commonwealth of Australia, Canberra.

Auditor certification and approval

For the purposes of the Act, only approved auditors can audit a risk management plan and the associated activities of a water supplier or water storage manager. Under s. 13 of the Act, the Secretary to the department, or their delegate, can approve individuals nominated by a water supplier or water storage manager as auditors. The legislation requires that approved auditors be an individual (a 'natural person'). Approval is based on a set of criteria that ensures the auditor is appropriately qualified and skilled to conduct the audit, and that they have no conflict of interest that would influence their ability to conduct the audit objectively.

Auditor certification

Exemplar Global Inc., in collaboration with the department and key stakeholders VicWater (Victorian Water Industry Association) and Water Services Association of Australia, has developed and manages a Water Quality Management System (WQMS) auditor certification scheme. Exemplar Global provides this Australia-wide certification scheme for auditors of water supply systems. This certification forms the core criteria for people wishing to apply for departmental approval to undertake audits in accordance with the Act. Certified auditors are deemed to have the necessary skills and attributes that the department requires for auditors to undertake risk management plan audits.

For further information on the scheme and certification requirements please refer to Exemplar Global's website at <http://exemplarglobal.org/certification/quality-systems/water-quality-management-system-wqms-auditor/>.

In some cases the department may require that an auditor has attained 'Lead WQMS Auditor' certification. The department recognises that an individual auditor may require support staff to provide technical and other specialised support. The department also encourages the professional development of junior auditors, who may wish to attend audits with auditors who have greater experience. The factors to be considered in requiring an auditor with Lead WQMS certification include the size of the audit team, the Exemplar Global certification status of the team members and the size and complexity of the water agency being audited. If 'Lead WQMS Auditor' certification is deemed required by the department, the Lead WQMS Auditor must make the final audit determination, completing and signing the audit certificate. The requirement for an approved auditor responsible for leading a team of auditors to have attained Lead WQMS Auditor certification will be determined by the department.

As a condition of their approval, auditors are required to maintain their WQMS auditor certification with Exemplar Global for the duration of any approval period.

Details of individuals certified under the WQMS scheme are available on the Exemplar Global website (a keyword search for 'water' may return the results of certified individuals) at <http://exemplarglobal.org/certification/what-we-offer/search-for-certified-individuals-or-organizations/>.

Avoiding conflicts of interest

To ensure an objective assessment of a water agency's risk management plan, conflicts of interest between the auditor and the water agency must be avoided. The following are considered to be conflicts of interest:

- writing or assisting in preparing a risk management plan for the water supplier or water storage manager
- having been an employee of the water supplier or water storage manager in the previous two years.

The amount and type of contract work the auditor, support staff 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 the department assesses potential conflicts of interest. This includes work relating to the design, construction or operation of water treatment plants. If auditors have queries about potential conflicts of interest it is best that they discuss these matters with the department prior to any prospective audit.

To ensure best practice risk management knowledge is shared within the industry, the department recommends that auditors do not conduct more than three successive regulatory audits of a water supplier or water storage manager.

Auditor engagement

Water agencies are required to seek the services of auditors certified under the WQMS scheme, requesting that they undertake an audit of their risk management plan under the Act. Figure 1 outlines the risk management plan audit process.

Water agencies must submit the following information to the department so it can review prospective risk management plan auditors:

- *Risk management plan auditor application form*, completed by the water agency
- *Risk management plan auditor declaration of conflict of interest form*, completed by the auditor.²

Water agencies should email this information to the department at <dwru@dhhs.vic.gov.au>.

Auditor approval

The department will review all information received for compliance with the requirements. If requirements have been met and the auditor is approved to conduct the audit, the department will provide written confirmation to both the water agency and the auditor, stating:

- the name of the approved auditor
- the risk management plan the auditor has been approved to audit
- the date period applicable to the approval
- any conditions of approval imposed on the auditor.

² Available at <<https://www2.health.vic.gov.au/public-health/water/drinking-water-in-victoria/drink-water-audits>>.

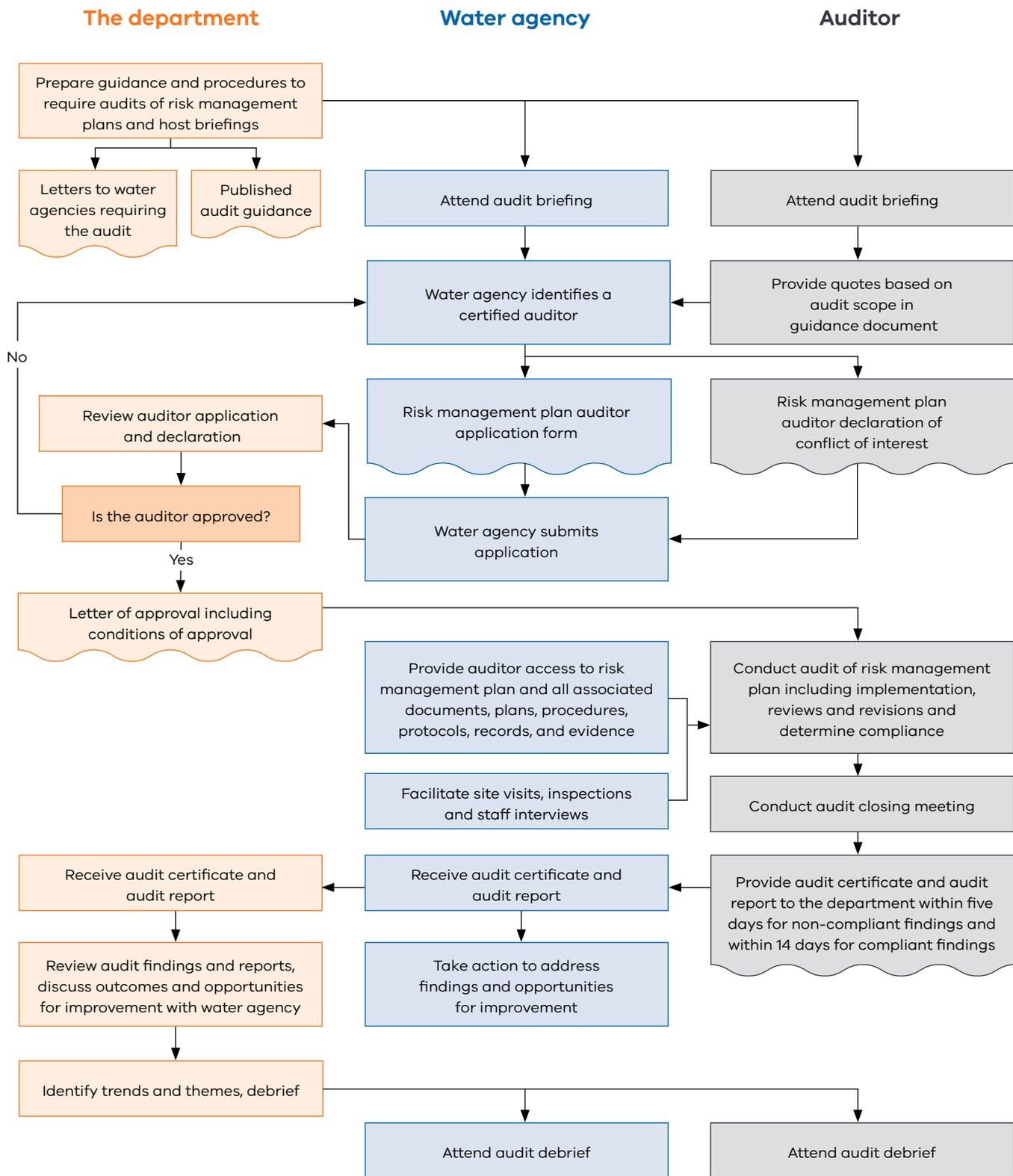
Potential penalties associated with audit requirements

To maintain the integrity and independence of the audit process, along with protecting public health, the Act contains potential penalties associated with risk management plan audit requirements (Table 1). Auditors and water agencies should familiarise themselves with these penalties to ensure requirements are followed.

Table 1: Potential penalties in the Act associated with audit requirements

Section	Description	Penalty units
12(3)	If the auditor is of the opinion that s. 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 five days after completing the audit.	60
14	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.	60
15	An approved auditor must comply with any condition imposed by the Secretary in approving him or her to be an auditor.	60
16	A person must not conduct an audit of a risk management plan that he or she has written or assisted in preparing.	60

Figure 1: Overview of the risk management plan audit process



Roles and responsibilities

The department's Water Unit

The broad role of the department's Water Unit is to administer the Act, providing for the supply of safe drinking water to protect public health.

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

- determine the time, frequency and the period to be covered by an audit, and administer processes to approve auditors
- specify conditions attached to the approval of an auditor
- define the criteria for assessment and reporting of the audit
- establish and maintain communications with all stakeholders
- work with water suppliers and water storage managers to ensure the findings of the audits are effectively implemented or utilised, and to create sector-wide learning opportunities where appropriate
- establish a process to manage complaints or disputes between auditors and water suppliers or water storage managers
- establish evaluation, review and revision processes to ensure the audit is meeting all objectives for all parties.

Water suppliers and water storage managers

The role of a water supplier is to manage risk in relation to the supply of drinking water and regulated water, ensuring the water supplied is safe and complies with the water quality standards specified in the legislation³

The role of a water storage manager is to manage risk in relation to its supply of water to a water supplier (up to the water supplier's off-take point). The water storage manager may treat this water to a drinking water standard or they may supply it as untreated water to water suppliers.

Water agencies must:

- have their risk management plan audited by the date specified by the department, for the audit period that applies
- make the risk management plan and all specified documents available to the auditor for inspection
- use an approved auditor to conduct the audit.

³ 'Regulated water' is water supplied for non-potable uses but which may be mistaken for drinking water.

Auditors

Auditors are responsible for:

- ensuring they are approved by the department prior to conducting any regulatory audit under the Act
- ensuring they comply with any conditions of approval
- ensuring they declare any conflicts of interest with the water agency they audit
- assessing the water agency's compliance with the risk management plan requirements for the time period specified by the department
- completing the audit within the required dates specified by the department
- issuing the audit certificate upon conclusion of the audit within the required timeframe
- submitting an audit report that details the water agency's compliance with the requirements.

Audit scope

Section 10 of the Act states what a risk management plan audit entails. Auditors are required to determine whether:

- a water supplier has complied with the requirements of s. 7(1) of the Act during the audit period for drinking water and regulated water (if applicable)
- a water storage manager has complied with the requirements of s. 8(1) of the Act during the audit period for water supplied to a water supplier.

Approved auditors are responsible for auditing the risk management plans of water suppliers and water storage managers to determine if the plan is compliant with the legislative requirements.

The purpose of the risk management plan audit is to determine whether the plan has been:

- prepared in accordance with the requirements of the legislation
- implemented and complied with
- continuously reviewed and, where appropriate, revised.

Further information is provided in this section about the department's expectations regarding the scope of the audit to assess compliance.

Auditors need to review and assess the water agency's risk management plan and its implementation to accurately inform their assessment of compliance. The audit requires a thorough assessment of the risk management plan contents, evaluation of identified risks to water supplies, a review of implementation of the risk management plan by the water agency, and the presence and effectiveness of procedures, processes and protocols in place to manage risk.

It is expected that a risk management plan audit may take a significant amount of time to conduct depending upon the complexity, the extent of the activities being audited and the geographic locations of sites and assets to be assessed. Auditors may need to request further information to determine the appropriate scale of the audit and submit a quote commensurate with their proposed audit scope of works. Auditors should agree with the water agency on the scale of the audit prior to offering their services because this may influence any quote submitted.

Auditors should familiarise themselves with the water agency to be audited. This may include information regarding:

- water supply arrangements and infrastructure
- water quality incidents (including issues reported under s. 22 of the Act to the department)
- the corrective and preventive actions taken when water quality standards have not been met
- other drinking water regulatory matters such as undertakings entered into with the department
- findings related to previous risk management plan audits.

Much of this information can be obtained from the water agency's annual reports on drinking water quality, available from the water agency's website (or through an internet search).

Documents

Auditors will need to view a number of documents to assess compliance with the requirements. These documents may include:

- a risk management plan
- a water sampling program
- an emergency management plan
- policy documents
- water supply plans or schematics
- standard operating procedures and protocols
- incident registers
- maintenance and works records
- training records
- supervisory control and data acquisition (SCADA) systems
- any document referred to in the risk management plan.

All required documents must be accessible and should be subject to regular review to ensure currency.

Site and asset assessment

Auditors should assess an adequate number of water agency sites and assets, along with practices associated with these, to ensure confidence in their assessment of the risk management plan. If the water agency operates multiple water supply systems auditors should visit a range of sites to accurately inform their assessment. Relevant assets to assess may include:

- water catchment and transfer systems
- water treatment plants
- clear water storages/basins
- source water offtakes
- booster (secondary) chlorinators
- the distribution system including water storage tanks, disinfection booster sites and network repair and maintenance activity sites
- high hazard facilities connected to the water supply system
- fluoridation plants
- regulated water supplies.

Further information relevant to assessing the water supply distribution system is included within Appendix 2 ('Risk associated with distribution systems').

Auditors should choose sites and assets to assess based on risk. This may include considering:

- whether sites have not previously been subject to auditor assessment, including site upgrades or renewals (this information should be provided to the auditor upon request by the water agency)
- assets associated with water quality incidents
- the complexity of particular assets

- the age and reliability of particular assets
- sites that have been associated with previous audit noncompliances or opportunities for improvement
- sites where significant upgrades or changes to the system have occurred (such as a control system upgrade, addition of new treatment unit, new facility, new development in catchment)
- water agency management arrangements such as where operations and maintenance functions are separated into unique operating areas or is outsourced.

Auditors should request information from water agencies regarding the historic audit of assets to inform audit activities. Where possible, the auditor should choose different systems from those examined in previous audits to ensure all agency assets and sites that are critical to the safe supply of water are audited over a period of time. However, auditors may wish to revisit water supply systems from the previous audit if it appears that unresolved issues remain. Auditors may also wish to review previous audit findings to determine whether findings from previous site assessments have been adopted more widely across the agency where relevant.

Staff interviews

Auditors are expected to speak with water agency personnel at all levels within the organisation (junior staff through to senior executive management) to assess risk management plan implementation. Auditors should consider who they need to meet with prior to beginning the audit to ensure the relevant staff can be made available during the audit. This should include staff working under contractual arrangements relating to the implementation of the risk management plan such as contracts for network operations and maintenance or water treatment facilities.

Key areas of assessment

Auditors are expected to assess water agency compliance with all requirements relating to risk management plans. Appendix 2 contains further information on a number of requirements that are key to the preventive risk management approach to the supply of water. This includes requirements relating to:

- emergency management arrangements
- water sampling programs and water quality standards
- critical control points and critical limits
- risk associated with distribution systems
- quantification of microbial risks.

The department strongly encourages auditors to assess a water agency's risk management plan compliance with each of these key regulatory areas (where applicable).

Assessing risk management plan compliance

Auditors must determine whether the water supplier or water storage manager has or has not met its legislative risk management plan obligations. As such, auditors are expected to assess the risk management plan and its implementation to enable an accurate assessment of compliance to be made. Water agencies must make the risk management plan and all associated documents available for inspection to auditors.

Regulatory obligations relating to the audit can be categorised into four groups:

- identification and management of risks to water supply
- risk management plan contents
- activities conducted to manage risk
- risk management plan documents.

Appendix 3 states all regulatory requirements as 'auditable elements', along with referencing these requirements with the *Australian drinking water guidelines* 'Framework for managing drinking water quality'. This reference is provided for information only; other risk management schemes may be used if they meet the requirements of the legislation.

To ensure water suppliers and water storage managers are measured against a common framework, the department requires auditors to determine whether:

- the auditable element is *present* and being implemented across the entire agency's systems (breadth)
- the auditable element is *effective* and is achieving the desired effect or outcome (depth or quality).

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

The following text describes the criteria for audit compliance outcomes and expected auditor actions. This information is provided to aid consistent reporting of audit outcomes. 'Completion of the audit' means that the auditor has given the audit certificate, not just completed the field assessment of the risk management plan compliance. Table 2 provides a summary of compliance grades, suggested auditor actions and the department's subsequent response.

Case studies are provided in Appendix 4 describing audit findings and outcomes.

Compliance

To be assessed as compliant with the legislative requirements, 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. There must be adequate 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 to be deemed compliant.

A 'compliant' grade can be assigned to each auditable element when it is present and has been implemented and the auditor has examined sufficient evidence to be satisfied that the element, as written or implemented across the entire agency, is effective.

This evidence may include documents such as water quality monitoring data, risk assessments and registers, protocols, implementation plans, control measures and verification measures.

When these criteria are satisfied the auditor may assign a compliant grade to that auditable element.

Noncompliance

Where legislative risk management plan requirements have not been met this must be regarded as a noncompliance. Noncompliances should be graded as either a minor, major or critical noncompliance.

Audit noncompliances may result from:

- the risk management plan failing to have the required content or required element
- insufficiently or inadequately addressing a risk identified in the risk management plan
- failure to implement a practice contained within the risk management plan
- failure to identify a key risk in the risk management plan
- failure to implement the risk management plan relative to all water supplies.

All noncompliances must be detailed on the audit certificate.

Critical noncompliance is defined as a noncompliance 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.

Major noncompliance is defined as a noncompliance 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 noncompliance is not rectified.

Minor noncompliance is defined as a noncompliance with one or more of the auditable elements, legislative requirements or risk management activities, where the potential impact of the noncompliance is not likely to be a serious or imminent risk to public health, or compromise public health.

Opportunities for improvement

Auditors should include comments relating to both compliant and noncompliant audit findings, providing feedback and suggestions to the water agency on how to improve their risk management plan and associated risk management activities or documents. Some implementation issues may be considered so trivial that they do not warrant a finding of minor noncompliance; these findings should be classified as 'opportunities for improvement' (OFI). Examples of where an OFI is appropriate include:

- identified improvements to the risk management plan that are outside the scope of auditable elements

- more than 80 per cent of the required documents are available to demonstrate that a particular activity required by the risk management plan has been undertaken.

OFls should be outcomes-focused; that is, opportunities may be suggested as to how particular objectives may be achieved, rather than suggesting prescriptive means of performing particular tasks. Sufficient detail should be provided to allow the water agency to understand and interpret the OFI. It is up to the water agency to determine whether the OFI will be implemented. If water agencies determine that an OFI will not be implemented, the department expects that there be valid justifications.

OFls should not be documented on the audit certificate; they should be clearly described and identifiable in the audit report.

Table 2: Summary of audit outcomes and auditor actions

Audit outcomes	Description	Auditor actions	Indicative departmental response
Compliant (including with identified opportunities for improvement)	Sufficient evidence to confirm that the agency has undertaken, prepared or implemented all actions in accordance with the legislation and their risk management plan. OFIs have been documented.	Give compliant certificate and audit report to water agency.	Letter of acknowledgement sent to the water agency. The department will note the identified improvement opportunities and request that the water agency advises what actions it intends to take.
Minor noncompliance	Noncompliance where there is a low potential for a risk situation, and the potential impact of the noncompliance is not likely to be a serious or imminent risk to public health, or compromise public health.	Give noncompliant certificate and audit report to water agency, with details.	The department will contact and meet with the water agency to discuss and agree on an action plan to address noncompliances.
Major noncompliance	Noncompliance where there is a high potential for a risk situation that is likely to compromise public health if the noncompliance is not rectified.	Give noncompliant certificate and audit report to water agency, with details.	The department will contact and meet with the water agency to discuss and agree on an action plan to address noncompliances.
Critical noncompliance	Noncompliance where a serious or imminent risk to public health is identified.	Give noncompliant certificate and audit report to water agency, with details.	The department will contact and meet with the water agency to discuss and agree on an action plan to address noncompliances.

Audit closing meeting

Prior to giving the audit certificate an audit closing meeting must be held between the auditor and relevant water agency representatives (including senior management) to present the audit findings and conclusions.

This meeting provides an opportunity to clarify any issues that have been identified during the audit and to discuss the audit outcome and any recommendations. The closing meeting also provides an opportunity to discuss implementation of any corrective actions in response to identified issues.

Audit certificate

Section 12(3) of the Act requires that auditors submit a copy of the certificate stating any noncompliant outcome to the department within five days of completing the audit.

Audit certificates from audits resulting in a compliant outcome must be sent to the department within 14 days of completing the audit. This is documented in the auditor's conditions of approval.

Auditors should note that these timeframes are bound by the Act; granting of time extensions is not possible.

Section 12 of the Act requires that, upon completion of the audit, auditors must give the person who commissioned the audit an audit certificate. This certificate must include the auditor's opinion on whether the water supplier or water storage manager has or has not met the risk management plan requirements.

The content required to be present on the audit certificate is at Appendix 5; auditors may wish to copy this template information into their particular business's certificate style for issue to the water agency.

Any audit noncompliances (including identifying whether individual noncompliances are critical, major or minor) must be stated on the certificate; if there is inadequate space these may be included in an accompanying document.

The original audit certificate, signed, dated and including any attachments outlining reasons for noncompliance, should be provided to the person who commissioned the audit, with a copy sent to the department within the required timeframe⁴ (within five days or 14 days depending on the audit outcome) and a further copy retained by the auditor for their records. Auditors should email the department's copy of the audit certificate to <dwru@dhhs.vic.gov.au>.

⁴ *Interpretation of Legislation Act 1984*, s. 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. 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.

Audit report

Auditors must prepare a detailed audit report for each audit they undertake. The report must contain sufficient information to allow the water agency to understand, interpret and address any audit findings, along with the audit outcome and recommendations.

The report must contain sufficient detail to provide confidence to the department that the water agency has or has not complied with the requirements.

Audit report content should include:

- the audit methodology (such as an assessment of risk management plan documentation, staff interviews, site visits, inspections, review of previous audit findings)
- the personnel involved in the audit (auditors, along with the positions of water agency staff)
- the scope of the audit (such as the water agency supply systems subject to audit, including any fluoridated or regulated water supplies)
- the findings associated with each auditable element, including how the water agency has, or has not, met the requirements
- the site visits or asset assessments undertaken
- the rationale for choosing sites or assets to assess
- observations made during the audit, including where best practice is observed
- any opportunities for improvement identified, collated in a summary table
- noncompliances (if applicable); if multiple noncompliances are identified these should be collated in a summary table
- the outcome of the audit.

The report should be given to the water agency and a copy of the full audit report to the department. Auditors should **email** the department's copy of the audit report to <dwru@dhhs.vic.gov.au>.

Further information

For further information on drinking water risk management plan regulatory audits please email the Water Unit at <dwru@dhhs.vic.gov.au> or call 1300 761 874.

Appendix 1: Summary of amendments to guidance since previous version

Amendment	Location
Removed references to superseded Safe Drinking Water Regulations 2005.	Throughout
Updated department email address for correspondence to dwru@dhhs.gov.au.	Throughout
<i>Risk management plan auditor application form and Auditor conflict of interest declaration form</i> removed and made available separately in fillable PDF format on the department's website.	n/a
Audit process flow diagram amended to improve clarity.	Figure 1
Increased clarity provided regarding 'auditor certification' and 'auditor approval'.	Page 3
Information provided to influence auditors to consider the scale of the prospective audit prior to submitting a quote for their services.	Page 9
Greater detail included regarding how sites and assets should be chosen by auditors to be assessment for compliance.	Page 10
Information provided that auditors can use the certificate template information in Appendix 5 with their particular business's style of certificate.	Page 15
Increased detail provided regarding expected audit report content.	Page 16
Detail included regarding key areas of assessment.	Appendix 2
References to ADWG <i>Framework for management of drinking water quality</i> updated.	Appendix 3
Audit case studies updated to reflect increased maturity of implementation of the Safe Drinking Water Regulations 2015 (where applicable).	Appendix 4
Audit certificate template updated.	Appendix 5

Appendix 2: Key areas of assessment

The following information is provided to assist auditors in understanding selected risk management plan requirements that are key to the preventive risk management approach to water supplies.

Emergency management arrangements

Regulation 8(1)(c) requires that water agency risk management plans contain details in relation to dealing with water quality or safety incidents, events or emergencies. The risk management plan or supporting documents must contain details of emergency management procedures for dealing with an incident, event or emergency that may adversely affect the quality or safety of drinking water.

The intent of this requirement is to ensure water agencies are prepared and have considered and controlled plans, procedures or protocols in place to respond adequately to incidents to protect public health.

When incidents do occur, having documented plans in place can assist water agencies in managing the issue efficiently and effectively, maintaining community confidence in the agency's response.

Relevant incidents, events or emergencies to be considered in emergency management procedures should relate to:

- known or suspected contamination of water
- equipment or plant failures (for example, power outages, treatment plant malfunction)
- extreme weather events and natural disasters (for example, flooding, earthquakes, lightning damage)
- human actions (for example, errors, inaction, sabotage)
- others identified by the water agency relevant to their supply.

Emergency management procedures should include details of:

- incident response, structural and organisational arrangements
- up-to-date contact lists of key people, agencies and businesses
- escalation protocols, including incidents reported to the department under s. 22 of the Act
- procedures and protocols particular to the types of incident and emergency
- public and media communication strategies and methods
- templates of public messages (such as a boil water advisory)
- plans for emergency water supplies
- emergency debrief protocols and continuous improvement of applicable protocols.

Regulation 8(1)(c)(i) requires that the positions held by those responsible for dealing with such incidents, events or emergencies be included. This should include:

- positions of internal parties
- the authority of internal staff (for example, suitability, qualifications, training completed)
- the responsibilities of external parties.

Regulation 8(1)(c)(ii) requires that the methods of communication to inform the public of any incident, event or emergency be included. Communication methods may be tailored to the particular incident, event or emergency, and may include:

- in person (such as residential door knocking)
- media releases
- website messages
- social media
- mobile phone text messaging services
- notices at community centres
- reviews of effective communication methods following an incident, event or emergency.

Auditors should assess the implementation of these emergency management plans through a review of:

- records providing evidence where it has been exercised or practiced
- a water agency's incident register and records including debriefs.

Auditors should confirm that notification has been made to the department in accordance with s. 22 of the Act, where appropriate.

It is expected that water agencies exercise their emergency management arrangements regularly, applying any learnings and informing changes to plans, procedures and protocols in efforts to continuously improve.

Water sampling programs and water quality standards

Water sampling and analysis is a vital part of a risk management plan to assist understanding of water quality risks in catchments and source water as well as providing lag monitoring of the quality of water supplied. Water agencies must understand the water quality risks associated with their supply systems – this will assist them in providing drinking water that meets water quality standards. The department has published guidance in relation to complying with the water sampling program requirements.⁵

Regulation 8(1)(d) requires that all water agencies' risk management plans contain details of a water sampling program that:

- identifies sample locations
- states how sample locations have been selected (the rationale for selecting the location)
- specifies the sampling frequency.

Water supplier's risk management plans must also:

- describe how sample locations are selected to ensure samples are representative of the drinking water supplied

⁵ Available at <<https://www2.health.vic.gov.au/public-health/water/drinking-water-in-victoria/water-guidance-notes>>.

- describe how a sufficient number of samples are collected to ensure the samples are representative of the drinking water supplied, and how the business ensures the sample locations are varied so samples are not collected from the same locations on consecutive sampling occasions
- specify how parameters for which samples will be tested and the frequency at which testing will be conducted to monitor its compliance with water quality standards have been selected
- describe how chemicals added to the drinking water have been considered regarding parameters and frequency of testing.

Water agencies should assess potential risks to water quality from catchment to tap (or point of supply in the instance of a water storage manager) and use this to identify parameters of interest to develop their water sampling programs. Auditors need to assess whether all relevant parameters have been identified, and that sampling and analysis is occurring at adequate locations and at the relevant frequency described in the water sampling program. Risks to human health that may need to be monitored include:

- microorganisms (both pathogens and indicator organisms)
- disinfectant residuals and disinfectant by-products
- organic and inorganic health-related chemical parameters
- potential contaminants associated with the water supply system infrastructure
- radiological hazards.

Water agencies may need to liaise with other stakeholders – such as land users, other water agencies and catchment management authorities – to better understand the risks to water supply systems.

Section 17 of the Act requires water suppliers to ensure all drinking water supplied complies with water quality standards; these standards are described in r. 12. A water supplier's water sampling program must document the monitoring program in place to assure that the drinking water quality standards are met. Auditors should assess the suitability of the water supplier's documented water quality standards. For the purposes of r. 12(b), the department has advised that water suppliers should adopt the *Australian drinking water guidelines* health-based guideline values.

When water quality standards have not been met, auditors should assess the adequacy of the water supplier's response. Suitable responses may include:

- regulatory actions such as notifying the department of noncompliant water supplied under s. 18 of the Act
- undertaking investigatory sampling to better understand the persistence and extent of water containing the parameter at elevated levels
- investigating the cause or source associated with the parameter's presence
- implementing catchment mitigation and treatment options to remove the parameter or reduce to acceptable levels
- implementing catchment mitigation and treatment options to remove water that contains the parameter at elevated levels and avoid recurrence of the issue.

Auditors should review procedures to ensure water analysis results and data are reviewed, ensuring that any abnormal results are identified in a timely manner. These procedures should also state the actions to be taken where appropriate, including notification to the department in accordance with s.18 of the Act.

Critical control points and critical limits

Regulation 8(1)(i) requires that water agencies that operate and maintain drinking water treatment processes detail in their risk management plan all critical control points, corresponding critical limits and the processes and activities to be undertaken when a critical limit has been exceeded.

The department has provided guidance to water agencies on operational performance in *Guidance – Risk management plans* (including reference to associated information within the *Australian drinking water guidelines*).⁶

Auditors are encouraged to assess an adequate number of the water agency's critical control points and associated critical limits to provide assurances that this requirement is being met. Auditors should assess the adequacy of the critical control point in managing the microbial, chemical and radiological hazards identified in the source water.

Auditors are encouraged to assess the following:

- whether all processes critical to the supply of safe drinking water have an identified and appropriate critical control point and that critical limits are in place to protect public health
- whether the critical limits are adequate to prevent (where possible) the delivery of unsafe drinking water to customers
- whether the treatment process operational targets, alert limits and critical limits are appropriately set to allow the water agency to effectively monitor, control and respond to the operational performance of its drinking water treatment processes
- whether the water agency has adequate protocols in place for an occasion when the critical limit is reached and, if so, whether these protocols have been followed when required
- whether there are effective change management protocols, processes or procedures in place associated with changing a critical control point's critical limit values
- whether there are effective change management protocols in place and that these include testing of the change to ensure the intended actions have been implemented (such as where the filtered water turbidity reaches the critical limit, the entire plant shuts down, and that this elevated turbidity has been simulated to confirm the programmable logic controller shuts down the plant to stop the supply of water).

⁶ Available at <<https://www2.health.vic.gov.au/public-health/water/drinking-water-in-victoria/water-guidance-notes>>.

Auditors may use the following publications to assist with assessing compliance with critical control point and critical limit requirements:

- for effective coagulation, flocculation and clarification – *Practical guide to the optimisation of chemical dosing, coagulation, flocculation and clarification*⁷
- for media filters – *Practical guide to the operation and optimisation of media filters*⁸
- for chlorination and chloramine disinfection – *Practical guide to the operation and optimisation of chlorine and chloramine disinfection*⁹
- *Good practice guide to the operation of drinking water supply systems for the management of microbial risk* – Water RA.¹⁰

Risk associated with distribution systems

Auditors must audit the activities and measures undertaken by the water agency in managing the risks to the quality of drinking water, including risk management of the water supply distribution systems. Activities and measures should include scheduled and unscheduled water mains cleaning, water mains repairs, commissioning of new water mains, tank inspection, maintenance and replacement, secondary disinfection, significant network operations such as large main shutdowns, backflow prevention and investigation of water quality complaints. Auditors should assess:

- the processes and procedures in place for activities such as water mains cleaning, water mains repairs, commissioning of new water mains, asset storage, inspection and replacement
- whether any particular guidelines or standards are followed
- whether good industry practices are being followed
- whether the water agency verifies the effectiveness of their activities and measures in managing risk
- whether the water agency has a back flow prevention management program in place that undergoes regular review.

Auditors may wish to use the *Practical guide to the operation and optimisation of distribution systems*¹¹ to assist with assessing best practice distribution system risk management. Reference to relevant information in the *Australian drinking water guidelines* on preventive measures for water quality management and verification of water quality are contained in the department's *Guidance – Risk management plans*.¹²

7 Mosse P, Braden D, Hourigan T 2009, *Practical guide to the optimisation of chemical dosing, coagulation, flocculation and clarification*, Water Industry Operators Association of Australia, Victoria, Australia.

8 Mosse P, Murray B, 2009, *Practical guide to the operation and optimisation of media filters*, Water Industry Operators Association of Australia, Victoria, Australia.

9 Mosse P, Braden D, Hourigan T 2009, *Practical guide to the operation and optimisation of chlorine and chloramine disinfection*, Water Industry Operators Association of Australia, Victoria, Australia.

10 Available at <<http://www.waterra.com.au/publications/document-search/?download=1173>>.

11 Mosse P, Deere D 2016, *Practical guide to the operation and optimisation of distribution systems*, Water Industry Operators Association of Australia, Victoria, Australia.

12 Available at <<https://www2.health.vic.gov.au/public-health/water/drinking-water-in-victoria/water-guidance-notes>>.

For those water agencies that operate dual pipe reticulation systems, auditors should assess the following:

- whether the recycled water scheme has a current and audited health and environment management plan available¹³
- the processes and procedures the water agency has in place to test the separation of dual pipe reticulation and plumbing both upon approval to occupy and on an ongoing basis to manage risk
- the processes and procedures in place for adequate management of the risk of recycled water cross-connections to the drinking water supply
- whether, following any recycled water cross-connections with drinking water, water agency processes and procedures were followed
- whether the water agency has identified higher risk end users of recycled water (such as schools and healthcare facilities), and whether adequate controls are in place for these properties
- whether processes and procedures are adequate and whether they have been implemented during the audit period by the water agency
- whether adequate change management processes are in place for the initial introduction of recycled water into a water supply area
- whether the water agency has a comprehensive register of all temporary-engineered cross-connections available, including the status of each clearly identified
- whether an issue referral and escalation procedure is available in the event of detections of cross-connections in either mains works or domestic plumbing.

Quantification of microbial risks

Regulation 8(2) requires a water agency that operates and maintains primary treatment of untreated water to quantify the microbial hazards in the untreated water, determine the treatment capability to treat those risks, and document the extent to which the treatment process removes or reduces the pathogenic microorganisms.

The department has published guidance on this requirement in *Appendix 2: Quantify microbial hazards*.¹⁴ Auditors should familiarise themselves with the published guidance in order to accurately assess the water agency's compliance in meeting the requirements.

The quantification of microbial hazards may involve a number of processes; these should be documented in applicable water agencies' risk management plans.

¹³ The Health and Environmental Management Plan should be prepared in accordance with the *Guidelines for environmental management – dual pipe water recycling schemes – health and environmental risk management*, EPA Vic 2005, Publication 1015 (specifically Section 6 and Appendix D), and the *Australian guidelines for water recycling – phase 1*, 2006, National Water Quality Management Strategy.

¹⁴ Available at <<https://www2.health.vic.gov.au/public-health/water/drinking-water-in-victoria/water-guidance-notes>>.

Source water assessment

- Describe the source water assessment method used to quantify microbial hazards.
- Identify and estimate the levels of microbial pathogens (bacteria, protozoa and viruses) in raw water.
- Determine catchment vulnerability and required microbial log reduction values (LRV) to determine the treatment required to remove or reduce the pathogenic microorganisms.
- Develop and implement a source water assessment monitoring program to identify changes over time, reviewing this periodically.

Water treatment assessment

- Describe the water treatment processes in the risk management plan used to remove or reduce pathogenic microorganisms.
- Review operational treatment performance data to determine the effectiveness of treatment barriers.
- Calculate the LRVs achieved by each treatment process.
- Determine and implement an effective verification monitoring program to identify any change in treatment efficacy over time.

Comparison of assessments

- Compare microbial pathogen presence and concentration with treatment efficacy.
- Describe the method of comparison employed.
- Review past operational data and case studies to assess the robustness of the assessment of catchment raw water quality in varying conditions such as following drought, extreme rainfall events, flooding and livestock and wildlife intrusion as applicable.
- Quantify any treatment capability deficiencies and performance in removing or reducing microbial pathogens.

Improvement plan

- Document when future source water assessments will be conducted and the rationale including treatment performance and comparison assessments.
- Identify any opportunities for improvement.
- Identify any treatment deficiencies in removing or reducing microbial hazards, and detail short-term and long-term actions along with the intended outcomes.
- Include an implementation plan for any actions identified.

Appendix 3: Auditable elements

Auditable element	Safe Drinking Water Act 2003 reference	Safe Drinking Water Regulations 2015 reference	Description	Australian drinking water guidelines – Framework for drinking water quality reference
Activities conducted to manage risk				
Risk management plan prepared	s. 7(1)(a) s. 8(1)(a)	r. 8 r. 9	The risk management plan must exist, and should be familiar and accessible to all relevant staff. The plan must include those elements and risks detailed in s. 9 of the Act and rr. 8 and 9. For water suppliers with regulated water supplies, the risk management plan must include regulated water. Features of a water agency that support a risk management plan might include organisational policy, risk management processes and adequate resources.	3.2.1 Water supply system analysis
Identification of risk	s. 9(1)(b)	r. 8(3)	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. The plan should also include the risks that must be considered under r. 8(3). The auditor should sight evidence that a recognised approach or framework has been applied to identify the risks to the system.	3.2.2 Assessment of water quality data 3.2.3 Hazard identification and risk assessment
Risk assessment	s. 9(1)(c)		Risk assessment should be undertaken by means of a recognised process or framework such as a 'consequence and likelihood' model or by use of other risk management principles. 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.	3.2.3 Hazard identification and risk assessment
Development and implementation of preventive strategies (including appropriate control and monitoring measures)	s. 9(1)(d)		The auditor should see evidence that appropriate and effective preventive measures have been put in place to manage identified risks. The auditor should also assess whether the measures in the plan would effectively manage the identified risks.	3.3.1 Preventive measures and multiple barriers 3.3.2 Critical control points 3.4.3 Corrective action 3.4.4 Equipment capability and maintenance

Auditable element	Safe Drinking Water Act 2003 reference	Safe Drinking Water Regulations 2015 reference	Description	Australian drinking water guidelines – Framework for drinking water quality reference
Activities conducted to manage risk				
Implementation and compliance with the requirements of the risk management plan	s. 7(1)(b) s. 8(1)(b)		The plan must be implemented in its entirety, and the water agency must comply with the requirements detailed in its risk management plan.	3.2 Operational monitoring 3.10.1 Management of documentation and records
Continuous review, update and improvement of the risk management plan	s. 7 (1)(c) s. 8 (1)(c)		The agency should be committed to ongoing review and revision of the risk management plan to ensure the plan remains relevant to the activities and risks.	3.1.2 Regulatory and formal requirements 3.1.3 Engaging stakeholders 3.2.3 Hazard identification and risk assessment 3.3.1 Preventive measures and multiple barriers 3.4.3 Corrective action 3.6.1 Communication 3.6.2 Incident and emergency response protocols 3.9.2 Validation of process 3.10.1 Management of documentation and records
Revision of risk management plan	s. 7(1)(d) s. 8(1)(d)		The auditor should sight evidence that the plan is reviewed and updated (if required) when there is a need for revision such as following an incident or emergency or a change to a system. This might include a feedback mechanism, a risk or issues register or a system that tracks revisions to the plan. The auditor should sight evidence of this organisational commitment such as a revision and review policy, or actions arising from the review process.	3.2.3 Hazard identification and risk assessment 3.3.1 Preventive measures and multiple barriers 3.4.3 Corrective action 3.6.2 Incident and emergency response protocols 3.9.2 Validation of process 3.10.1 Management of documentation and records

Auditable element	Safe Drinking Water Act 2003 reference	Safe Drinking Water Regulations 2015 reference	Description	Australian drinking water guidelines – Framework for drinking water quality reference
Risk management plan contents				
Detailed description of system of supply	s. 9(1)(a)		The description of the supply in the risk management plan provides the basis for hazard identification and risk analysis. The description may be in the form of schematics, diagrams, maps or text. It should encompass catchment-to-tap for a water supplier, and catchment to point of supply to the water supplier for a water storage manager. Detail must be comprehensive enough to develop a thorough understanding of the supply.	3.2.1 Water supply system analysis
The positions held by those responsible for managing hazards and risks to the quality of the water	r. 8(1)(a)		The risk management plan must identify the positions held by the people responsible for managing the risks identified by the plan.	3.1.2 Regulatory and formal requirements 3.4 Equipment capability and maintenance 3.5.4 Corrective action 3.7.1 Employee awareness and involvement
Details of the procedures for consultation with other water agencies in relation to matters relevant to the hazards and risks to quality of the water supplied— (i) to the water agency by other water agencies; and (ii) by the water agency to other water agencies	r. 8(1)(b)		The water agency should be able to provide evidence of formal communication protocols and agreements that detail the arrangements for information transfer, consultation and other communication on hazards and risks to water quality with other relevant water agencies. Protocols, meeting minutes, documented outcomes and formal communications should be available as evidence.	3.1.3 Engaging stakeholders

Auditable element	Safe Drinking Water Act 2003 reference	Safe Drinking Water Regulations 2015 reference	Description	Australian drinking water guidelines – Framework for drinking water quality reference
<p>Risk management plan contents</p> <p>Details of or reference to 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> <ul style="list-style-type: none"> (i) the positions held by 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 		r. 8(1)(c)	<p>The water agency needs to demonstrate it has in place emergency management arrangements and procedures for an incident, event or emergency that is likely to have a potential adverse impact on the quality or safety of drinking water.</p> <p>The details required by r. 8(1)(c) must be in a water agency's risk management plan or clearly referenced in the risk management plan to another document.</p> <p>The auditor may wish to inspect a selection of recorded incidents, events or emergencies and determine, where possible, whether the arrangement and documented procedures were followed. Auditors should also note that suspected contamination of water must also be reported to the department under s. 22 of the Act; this requirement should be associated with incidents, events or emergencies that are likely to adversely affect the safety of drinking water.</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 or emergency identifies that the procedure requires modification, then there is an expectation that the procedure would have been modified, as required by s. 7(1)(d) of the Act.</p>	<p>3.6.1 Communication</p> <p>3.6.2 Incident and emergency response protocols</p>
<p>Details of a water sampling program that—</p> <ul style="list-style-type: none"> (i) identifies the locations at which samples will be collected; and (ii) outlines how the locations for collection of samples have been selected; and (iii) specifies the frequency with which samples will be collected 		<p>r. 8(1)(d)(i)</p> <p>r. 8(1)(d)(ii)</p> <p>r. 8(1)(d)(iii)</p>	<p>The water sampling program must be part of the water agency's risk management plan.</p> <p>It is expected that the sampling locations and the frequency of sampling at each location selected is clearly documented within the water sampling program such that it can easily be interpreted.</p> <p>The process and logic used by a water agency in selecting the sampling locations for routine sample collection must be described in the water sampling program. Sampling location selection needs to take into consideration the hazards and risks identified in its risk assessment.</p>	<p>3.2.1 Water supply system analysis</p> <p>3.2.2 Assessment of water quality data</p> <p>3.2.3 Hazard identification and risk assessment</p> <p>3.5.1 Drinking water quality monitoring</p>

Auditable element	Safe Drinking Water Act 2003 reference	Safe Drinking Water Regulations 2015 reference	Description	Australian drinking water guidelines – Framework for drinking water quality reference
<p>Risk management plan contents</p> <p>Details of a water sampling program that, in a risk management plan developed by a water supplier, describes how the following matters were considered when determining the locations for collection of samples and the frequency of samples—</p> <p>(A) the need to select the locations from which samples will be taken with a view to ensuring that the samples collected in accordance with the water sampling program are representative of the drinking water supplied in the relevant water sampling locality; and</p> <p>(B) the need to have a sufficient number of samples of drinking water collected to ensure that those samples are, so far as practicable, representative of the drinking water supplied in the water sampling locality</p>		r. 8(1)(d)(iv)	<p>A water supplier needs to clearly detail how the matters required in r. 8(1)(d)(iv) have been considered in the development of the water sampling program.</p> <p>An auditor needs to be satisfied that the water supplier has considered the unique size and complexity of each water sampling locality in determining the number of water samples to be collected and on their location to monitor the quality of drinking water across the entire water sampling locality.</p>	<p>3.2.1 Water supply system analysis</p> <p>3.2.2 Assessment of water quality data</p> <p>3.2.3 Hazard identification and risk assessment</p> <p>3.5.1 Drinking water quality monitoring</p>
<p>Details of a water sampling program that specifies the basis on which the location for the collection of a particular sample will be determined, so as to ensure that, for the purposes of routine sampling, samples are not taken from the same collection point within a water sampling locality on two consecutive occasions</p>		r. 8(1)(d)(v)	<p>A water supplier needs to provide the basis in their water sampling program of the process it has adopted to randomly select drinking water sampling locations throughout the supply network to ensure drinking water samples are not collected from the same location on two consecutive occasions.</p>	<p>3.2.1 Water supply system analysis</p> <p>3.2.2 Assessment of water quality data</p> <p>3.2.3 Hazard identification and risk assessment</p> <p>3.5.1 Drinking water quality monitoring</p>

Auditable element	Safe Drinking Water Act 2003 reference	Safe Drinking Water Regulations 2015 reference	Description	Australian drinking water guidelines – Framework for drinking water quality reference
<p>Risk management plan contents</p> <p>Details of a water sampling program that specifies the parameters for which samples will be tested and the frequency at which tests will be conducted for each parameter and, in a risk management plan developed by a water supplier, identifies—</p> <p>(A) how the selection of the parameters and frequency of testing for each will assist the water supplier to monitor its compliance with the drinking water quality standards; and</p> <p>(B) how the chemicals and other substances used to disinfect or treat the drinking water being supplied to the relevant water sampling locality have been considered when selecting the parameters and the frequency for selecting the parameters</p>	r: 8(1)(d)(vi)	<p>A water agency's water sampling program needs to detail the parameters and the frequency of testing of each parameter for each of its water systems. The water agency needs to clearly detail the basis for selecting the parameters to be monitored and the frequency of testing.</p> <p>It must be evident to the auditor that the water agency has considered the specific characteristic of individual water systems and the hazards and risks identified in its risk assessment in developing its basis.</p> <p>For water suppliers, the additional requirements of part (A) and (B) of the regulation apply.</p> <p>A water supplier's water sampling program should document the basis for change of sampling frequency in response to any water quality standard exceedances, or the breaches of particular parameters.</p> <p>A water supplier must ensure corresponding parameters to water treatment chemicals used are tested and monitored in the drinking water supply. This will include potential chemical residual and treatment chemical by-products.</p>	<p>3.2.1 Water supply system analysis</p> <p>3.2.2 Assessment of water quality data</p> <p>3.2.3 Hazard identification and risk assessment</p> <p>3.5.1 Drinking water quality monitoring</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>	r: 8(1)(e)(i) r: 8(1)(e)(ii)	<p>The water agency 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.</p> <p>A quality assurance program to verify the quality of chemicals can be administered by a chemical supplier or third party, with the water agency 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 plan.</p>	3.4.5 Materials and chemicals	

Auditable element	Safe Drinking Water Act 2003 reference	Safe Drinking Water Regulations 2015 reference	Description	Australian drinking water guidelines – Framework for drinking water quality reference
<p>Risk management plan contents</p> <p>Details of the requirements for competency and training of personnel who are employed or engaged by the water agency, as they relate to monitoring and management of hazards and risk, including policies, standards and guidelines that are imposed or adopted by the water agency</p>	r: 8(1)(f)	r: 8(1)(f)	<p>Regulation 8(1)(f) requires the water agency to state the processes, policies or procedures in relation to competency and training requirements for personnel who are responsible for managing hazards and risk in water systems. This applies to personnel at all applicable levels within the water agency.</p> <p>The auditor will need to be satisfied that an appropriate level of training has been completed or that personnel have attained suitable competencies commensurate with the risk they manage.</p>	<p>3.7.1 Employee awareness and involvement</p> <p>3.7.2 Employee training</p>
<p>Details of the infrastructure and other features of the system of supply that are designed to assist in the management of risks to the quality of the water that are identified in the risk management plan, including the method by which the effectiveness of the infrastructure and other features is verified</p>	r: 8(1)(g)	r: 8(1)(g)	<p>Based on the details of the infrastructure and other features of the system in the risk management plan and their knowledge of the system, the auditor will need to determine if the system is effective for managing the identified risks and if the verification measures are appropriate.</p>	<p>3.2.1 Water supply system analysis</p> <p>3.3.1 Preventive measures and multiple barriers</p> <p>3.3.2 Critical control points</p> <p>3.4.2 Operational monitoring</p>
<p>Details of the activities undertaken, and measures taken, to monitor and manage hazards and risks to the quality of the water identified in the risk management plan, including any methods by which the effectiveness of the activities and measures are verified</p>	r: 8(1)(h)	r: 8(1)(h)	<p>The requirements that apply to s. 9 of the Act are relevant to this section, in particular those relating to s. 9(1)(d).</p> <p>Regulation 8(1)(h) requires the risk management plan to include measures to verify the preventive actions in the risk management plan to ensure 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 and the verification measures are appropriate.</p>	<p>3.3.1 Preventive measures and multiple barriers</p> <p>3.3.2 Critical control points</p> <p>3.4.1 Operational procedures</p> <p>3.4.2 Operational monitoring</p> <p>3.5.3 Short-term evaluation of results</p>

Auditable element	Safe Drinking Water Act 2003 reference	Safe Drinking Water Regulations 2015 reference	Description	Australian drinking water guidelines – Framework for drinking water quality reference
<p>Risk management plan contents</p> <p>If the risk management plan is prepared by a water agency that operates and maintains a drinking water treatment process, it must contain —</p> <ul style="list-style-type: none"> (i) all critical control points in the system of supply; and (ii) the critical limits relevant to each critical control point that is detailed in the risk management plan; and (iii) any actions, procedures, processes, policies, standards, or guidelines that are applied when a critical limit is exceeded 		<p>r. 8(1)(i)(i)</p> <p>r. 8(1)(i)(ii)</p> <p>r. 8(1)(i)(iii)</p>	<p>Regulation 8(1)(i) requires water suppliers and water storage managers who operate a water treatment process to establish critical control points (CCPs) for this treatment process. CCPs may be an activity, procedure or process at which control can be applied, and the effective operation of that control is essential to prevent a hazard that may arise to human health or reduce the hazard to an acceptable level.</p> <p>Relevant critical limits for these CCPs must be detailed in the risk management plan. The basis for selecting the critical limits should be justified; they must be protective of human health.</p> <p>Corrective actions, which may include actions, procedures or processes, must be documented and acted upon if there are deviations from the critical limit criteria.</p> <p>Auditors should assess the preventive risk management activities outlined when critical limits are exceeded and determine whether they are appropriate in managing risk to the drinking water supply. This may include a review of actions following any critical limit exceedances, along with protocols associated with testing or challenging critical limits to ensure any associated corrective actions are taken.</p> <p>Protocols and processes should be in place regarding changing of critical limit values to ensure adverse outcomes are minimised.</p>	<p>3.3.1 Preventive measures and multiple barriers</p> <p>3.4.3 Corrective action</p>

Auditable element	Safe Drinking Water Act 2003 reference	Safe Drinking Water Regulations 2015 reference	Description	Australian drinking water guidelines – Framework for drinking water quality reference
<p>Identification and management of risks to water supply</p> <p>On and from 1 January 2016, for the purposes of s. 9(1)(e) of the Act, a risk management plan prepared by a water agency that operates and maintains a primary drinking water treatment process must contain details of the methodology that is used by the water agency to quantify microbial hazards, including—</p> <ul style="list-style-type: none"> (a) the extent to which pathogenic microorganisms are present in water that enters the drinking water treatment process; and (b) the extent to which that drinking water treatment process: <ul style="list-style-type: none"> (i) removes those pathogenic microorganisms from the water; or (ii) reduces the amount of those pathogenic microorganisms in the water <p>For the purposes of s. 9(2) of the Act, a risk management plan must address the following risks—</p> <ul style="list-style-type: none"> (a) the risk to human health that arises from the presence in water of: <ul style="list-style-type: none"> (i) pathogenic micro-organisms; (ii) inorganic chemicals, including inorganic disinfection by-products; (iii) organic chemicals, including pesticides, pesticide residues and organic disinfection by-products; (iv) radiological parameters; (v) algal toxins 		<p>r. 8(2)(a)</p> <p>r. 8(2)(b)(i)</p> <p>r. 8(2)(b)(ii)</p>	<p>Regulation 8(2) requires that the risk management plans of water agencies that operate a primary water treatment process detail the methodology used to quantify microbial hazards.</p> <p>These water agencies must be aware of the extent to which pathogenic microorganisms are present in water that enters the treatment process (untreated water).</p> <p>The extent of removal and reduction of these pathogens via the treatment processes applied must also be documented in the risk management plan.</p>	<p>3.2.2 Assessment of water quality data</p> <p>3.2.3 Hazard identification and risk assessment</p>
		<p>r. 8(3)(a)(i)</p> <p>r. 8(3)(a)(ii)</p> <p>r. 8(3)(a)(iii)</p> <p>r. 8(3)(a)(iv)</p> <p>r. 8(3)(a)(v)</p>	<p>Auditors should assess evidence that the hazards identified in r. 8(3)(a) were addressed in the risk assessment required under s. 9(1)(c) of the Act, and that appropriate preventive measures were put in place to address these risks, as required by s. 9(1)(d) of the Act.</p>	<p>3.2.3 Hazard identification and risk assessment</p>

Auditable element	Safe Drinking Water Act 2003 reference	Safe Drinking Water Regulations 2015 reference	Description	Australian drinking water guidelines – Framework for drinking water quality reference
<p>Identification and management of risks to water supply</p> <p>For the purposes of s. 9(2) of the Act, a risk management plan must address the following risks—</p> <p>(b) risks arising from an incident or event that may cause the organisms, substances and matters referred to in r. 8(3)(a) to be introduced into the system of supply of the water supplier or the water supplied by the water storage manager by humans or nature</p>		r. 8(3)(b)	<p>The evidence that the auditor will need to see will be that the hazardous events identified in rr. 8(3)(b) and 8(3)(c) were addressed in the risk assessment required under s. 9(1)(c) of the Act, and that appropriate preventive measures were put in place to address these risks, as required by s. 9(1)(d) of the Act.</p>	3.2.3 Hazard identification and risk assessment
<p>For the purposes of s. 9(2), a risk management plan must address the following risks—</p> <p>(c) the risk of the organisms, substances and matters referred to in r. 8(3)(a) entering into water being supplied by the water supplier or water storage manager by reason of the transfer or distribution of that water</p>		r. 8(3)(c)	<p>The evidence that the auditor will need to see will be that the hazardous events identified in rr. 8(3)(b) and 8(3)(c) were addressed in the risk assessment required under s. 9(1)(c) of the Act, and that appropriate preventive measures were put in place to address these risks, as required by s. 9(1)(d) of the Act.</p>	3.2.3 Hazard identification and risk assessment
<p>Risk management plan documents</p> <p>For the purposes of s. 10(2) of the Act, the specified documents are—</p> <p>(b) any document or operating manual, procedure or protocol created pursuant to the risk management plan, referred to in the risk management plan or containing material relating to the content of the risk management plan; and</p> <p>(c) any document or record that provides evidence of implementation of the risk management plan</p>	s. 10(2)	r. 9(b) r. 9(c)	<p>The auditor will need to view and assess all documents that are associated with the risk management plan. A water agency can include or make reference to these documents in any manner that they wish. During the audit all documentation must be available for inspection. Regulations 9(b) and 9(c) refer to supporting documentation. These are described as being documents, operating manuals, procedures or protocols referred to in the risk management plan. Section 10(2) requires the auditor to inspect these documents, ensuring they are appropriate to manage the identified risks. Additionally, if these documents detail actions that are to be implemented, or if they refer to actions undertaken under certain circumstances, then evidence must be available that the required actions are being taken.</p>	3.4.1 Operational procedures 3.4.2 Operational monitoring 3.10.1 Management of documentation and records

Appendix 4: Audit case studies

Case study 1: Incident, event and emergency management arrangements

The risk management plan of a water supplier includes the positions held by staff responsible for managing hazards and risks relating to the quality of drinking water. The risk management plan also references emergency management arrangements and procedures for dealing with an incident, event or emergency that may adversely affect the quality or safety of drinking water.

The emergency management arrangements detail positions responsible for managing drinking water quality incidents and emergencies. Procedures for communicating information to the public during a water quality event or incident are included in the emergency management arrangements. The emergency management arrangements include a boil water advisory template that has been approved by senior management, along with procedures on issuing and withdrawing the boil water advisory and the use of social media to inform the public during such an incident.

The emergency management plan (EMP) has been reviewed within the audit period, and where the business has had an event relevant to the EMP, there is evidence of the use of the procedures. Notification has been made to the department of the incident in accordance with s. 22 of the Act.

Audit finding

The risk management plan includes the positions held by staff responsible for managing hazards and risks to the quality of drinking water as required by the regulations and also references emergency management arrangements and procedures for dealing with a water quality incident. The water supplier is deemed to be **compliant** with this requirement.

Comment

If the plan identified names but not the positions of staff responsible for managing the hazards and risks, then the finding would be changed to a **minor noncompliance**, as this would not have complied with rr. 8(1)(a) and 8(1)(c).

Case study 2: Consultation with other water agencies

A water storage manager supplies untreated water to a number of water suppliers via different catchment areas. The water storage manager has identified and assessed a range of risks in each of the catchment areas that it uses to supply water to water suppliers. Some of the risks are common to all the catchment areas; other risks are unique to individual catchments.

To better inform their risk assessment process the water storage manager includes water suppliers in meetings, reviewing the risk assessment of catchments relevant to the water they receive. This process has better informed the water storage manager and the water suppliers of potential risks to drinking water and what activities and controls are in place to mitigate risk. This sharing of information strengthens the management of risk between the agencies.

The water storage manager has regular formal meetings with the water suppliers that they supply water to. The requirement to hold these meetings is documented within their risk management plan. The meetings are held in two formats. The first format involves meetings between all the relevant water suppliers and the water storage manager, where they meet to discuss issues of common interest. The second format consists of meetings between the water storage manager and the individual water suppliers, where they discuss particular issues specifically in relation to meeting the requirements of the *Safe Drinking Water Act 2003*. The water storage manager also meets with other water-related stakeholders as part of a catchment-wide water quality network, enabling the water storage manager to promote water quality improvement works across the catchments.

During the audit, it was identified that stakeholders in one of the three catchment areas that the water storage manager uses to supply water to the water suppliers were not being engaged by the water storage manager.

Audit finding

The water storage manager is found to be **compliant** with the requirements of rr. 8(1)(b) and 8(3), provided all the risks listed in the regulation have been assessed. The available evidence provided demonstrates that the water storage manager is implementing the activities identified in their risk management plan – that is, engaging with water suppliers and detailing procedures for the consultation with other water agencies in relation to hazards and risks. The provided evidence also demonstrates the water storage manager is establishing networks with other relevant stakeholders to promote water quality improvements. An **opportunity for improvement** was identified, suggesting the water storage manager engages with water-related stakeholders in the catchment areas where there is currently no regular interaction

Comment

Water agencies are required to consult with other water agencies in relation to matters relevant to hazards and risks to the quality of water being supplied to or by another agency. Water agencies must detail procedures for consultation in their risk management plan.

The water storage manager was **compliant** with the requirements of rr. 8(1)(b) and 8(3) because they had assessed all the risks listed in the regulations, documented details of the consultation procedures with other water agencies in their risk management plan and have documentation to support implementation of those procedures.

If the water storage manager has assessed all the risks listed in the regulations but has not documented the consultation procedures within their risk management plan, the audit finding would be a **minor noncompliance** because the risk management plan does not contain the detail required by the Act and regulations.

Case study 3: Water sampling program

When developing their sampling program a water supplier reviews historic water supply risk assessments and sanitary surveys. These assessments list potential hazards within each of their water supply catchments and systems. Hazards identified include pathogenic microorganisms and organic and inorganic chemicals.

A more recent risk assessment was undertaken, which highlighted that seasonal agricultural practices in catchments increased the chemical risks to drinking water at certain times of the year. These seasonal risks are documented in the risk management plan and form the basis for determining both the sampling frequency and the time of year, along with the sampling locations to monitor for these agricultural chemicals. The same process has been applied to other types of hazards that require monitoring.

The water supplier's drinking water sampling program details processes to ensure all samples are collected at both the required frequency and number. There are also documented procedures to ensure parameters were tested at the frequency specified and all results were reviewed, with all results stored in a water quality database. The water sampling program has determined the frequency of sampling based on the population of the water sampling locality, and has identified locations for sampling based on the geographic extent of the network. The water sampling program has been incorporated into the water supplier's risk management plan.

Audit finding

The risk management plan is **compliant** with the requirements of rr. 8(1)(d)(i), 8(1)(d)(ii), 8(1)(d)(iii) and 8(1)(d)(vi).

The program identifies the locations for sample collection, frequency of sample collection and the number of samples to be collected. The program also specifies what parameters are to be monitored, why those parameters have been selected and on what basis the sampling frequency and specific time those samples are to be collected. All of these details demonstrate that the water supplier is monitoring parameters identified as potential hazards in its risk assessment at the required frequency and locations.

Comment

If the water supplier assessed the risk of agricultural chemicals in the catchment that require monitoring but did not consider aligning the frequency and timing of the sampling to the agricultural activities surrounding the catchment, then this may have resulted in an **opportunity for improvement**.

Case study 4: Competency and training of personnel

A water supplier recognises the crucial role that personnel – and in particular water treatment plant operators – play in providing safe drinking water. The water supplier has a water quality policy that documents their commitment to providing safe drinking water by using only suitably skilled and competent staff to operate water treatment plants. This policy is endorsed by the water supplier's managing director.

The water supplier's commitment is further supported by a human resources policy to ensure all staff, including contractors, working in areas of catchment management, water quality, water treatment, water supply and storage are adequately trained and competent in the systems they operate or manage. The systems include water treatment, distribution and the monitoring for hazards and risks. The water supplier adopted and implemented the *Victorian framework for water treatment operator competencies – Best practice guidelines*, which provide guidance on the minimum competencies for water treatment operators. The water supplier also schedules regular training for staff, informing them of internal processes and procedures relating to water quality, emergency management and incident response protocols, and includes operational personnel in risk assessments and change management processes.

Staff are encouraged to attend external training, industry conferences and workshops related to their work. The water supplier's human resources unit keeps records of all staff training. The risk management plan details and references the water supplier's policies, procedures and processes that relate to, and support their commitment to, ensuring personnel are adequately trained and competent to provide safe drinking water.

Audit finding

The water supplier is found to be **compliant** with the requirements of r. 8(1)(f). The evidence provided demonstrates that the water supplier has specified requirements for training and competencies of personnel and that these are documented in its policies, risk management plan and relevant procedures and processes that are fully implemented.

Case study 5: Critical control points and critical limits

A water agency that operates and maintains drinking water treatment processes has documented all critical control points and associated critical limits in its risk management plan.

An assessment of the preventive risk management activities to be applied when a critical limit has been reached was found to be inadequate and fails to prevent out-of-specification drinking water from being supplied to consumers.

Source water is taken from an unprotected catchment where the presence of *Cryptosporidium* is common. Media filtration is the only treatment barrier for protozoa removal available at the treatment plant. In line with the *Australian drinking water guidelines*, critical limit and target criterion for filtered water turbidity on each media filter was set at 0.5 and 0.2 NTU respectively by the water agency. Alarms are triggered following a delay time of 30 minutes.

Excluding the filter ripening period, performance records on the agency's media filters showed the typical filtered water turbidity in water produced were below 0.2 NTU. But on several occasions, due to issues with the coagulant dosing system overloading filters, filtered water turbidity was allowed to spike up to 1.5 NTU for an extended period of 30 minutes before the water treatment plant was automatically shut down, despite the critical limit for the media filter being set at 0.5 NTU. Backwash of filters at this plant was only set on filter run time.

Audit finding

The water agency's risk management plan has documented all the critical control points and detailed the critical limits and the risk management activities applied when a critical limit has been breached. However, the long delay time of 30 minutes of the filtered water turbidity being above 0.5 NTU before the trigger of an alarm to operators and shut down of the treatment plant was not adequate; the effective removal of protozoan pathogens from source water cannot be assured at higher NTU levels. As such, drinking water produced when filtered water turbidity was above 0.5 NTU has a high probability of being unsafe and may pose a risk to public health if consumed.

The water agency has failed to meet the requirements of s. 9(1) of the Act along with rr. 8(1)(g), (h) and (i) and consequently is assessed as being a **critical noncompliance**.

Comment

Good risk management practices for drinking water treatment processes require the setting of appropriate target criteria, critical limits and alarm delay times for each critical control point. The target criteria should be the operational limit a water agency aims to operate within at all times. Deviations of performance outside of this target criterion indicate the beginning of the loss of control of a treatment process. The target criteria should be set to allow for timely alert and sufficient time for a water agency to respond and implement corrective actions before the critical limit is reached.

Should the critical limit be reached, the risk management activities applied by a water agency needs to demonstrate it has taken the appropriate measures to minimise the production and supply of out-of-specification water. The production and supply of filtered water with turbidity greater than 0.5 NTU for greater than 30 minutes indicates a water agency has not been able to effectively manage the protozoan risk identified in its risk management plan.

Case study 6: Water sampling program and frequency of testing

On reviewing a water supplier's sampling program, the auditor investigated the responses to a number of nickel exceedances in the reticulation system, both at customers' taps and storage tanks. The auditor noted four consecutive monthly exceedances across the system, with the remainder of the monthly samples complying with the water quality standard. The auditor found that the water supplier notified the department in accordance with the requirements of s. 18 (which was set out in the risk management plan) but usually responded to these exceedances as isolated incidents. The responses mainly consisted of arranging further sampling, verifying that the resample results were satisfactory and checking plant performance records the day before the exceedances were detected.

The auditor found no evidence of any documented procedure in the risk management plan to review sampling frequency in response to the exceedances. The auditor also noted a lack of information relating to the presence or absence of nickel in the drinking water at periods in between the monthly scheduled sampling.

The auditor also noted that while managers within the water supplier's organisation were notified of most incidents, this appeared to be in an ad hoc manner and not in the manner stated in the risk management plan.

Audit finding

Water suppliers should vary the frequency of their sampling program accordingly to ensure they have sufficient resolution to inform them adequately of the risk that particular hazards may pose in drinking water.

The auditor records a **minor noncompliance** with r. 8(1)(d)(vi)(A), as the water supplier could not demonstrate that the monthly sampling frequency was assisting with monitoring its compliance with the drinking water quality standard for nickel following numerous regular exceedances.

The department encourages water suppliers who regularly fail to meet particular water quality standards to consider entering into an undertaking with the department (under s. 30 of the Act). Undertakings can assist the water supplier to implement corrective and preventive actions, with the aim of meeting the water quality standard requirements.

Case study 7: Risk management plan control measures

A water supplier manages a regulated water supply to a small rural town that has a high level of seasonal summer visitors. Untreated water is piped into residential housing, 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 this non-drinking water.

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

Audit finding

The risk management plan has failed to document 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 the water supplier has not complied with rr. 8(1)(g) and 8(1)(h). The omission is a **major noncompliance**, due to the likelihood of public health being compromised.

Comment

Had the water supplier's risk management plan included a strategy of engagement with the local council that clearly assigned responsibility for tap signage 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).

Case study 8: Risk identification and control measures

A water supplier harvests water from an unprotected catchment that is 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 assess the risk from stock directly accessing streams or indicate a communication strategy with catchment land stakeholders, nor does it have a response protocol for the detection of any *Cryptosporidium*.

This water is likely to be subject to faecal contamination from cows, and the risk of cryptosporidiosis transmission has not been effectively addressed. The *Australian drinking water guidelines* recommend 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 cryptosporidiosis has been assessed as very high and likely to compromise public health if not rectified through the addition of adequate filtration, storage, UV disinfection or other control measures. The water supplier does not meet the requirements of rr. 8(1)(h) and (g) and 8(3)(a)(i) and (b) and (c). A serious risk to public health has been identified and the auditor notes a **critical noncompliance**.

Case study 9: Quantification of microbial hazards

A water agency that operates primary drinking water treatment processes is required to include microbial hazard quantification in its risk management plan. The water agency conducts sanitary surveys and tests for the presence and concentration of *E. coli* on a representative number and type of its water supply catchments, to detail pathogen levels related to human and livestock activities. Weather events and activities occurring on land surrounding the catchment are also considered. From this information the water agency has categorised all of its catchment's vulnerability to microbial pathogens (bacteria, protozoa and viruses). The water agency can then determine if the prescribed water treatment process reduces these pathogens to acceptable levels.

The water agency employs multiple treatment barriers, as needed, ensuring that redundancy has been built into the system if one of the barriers were to fail. The water agency is knowledgeable of the microbial log reduction value (LRV) of each of these barriers and has good operational monitoring practices in place that ensure the barriers are operating to the level required to remove or reduce microbial pathogens. The methods used and the extent to which the treatment processes removes or reduces pathogens from the source water is documented in the water agency's risk management plan.

Audit finding

By conducting sanitary surveys at all water supply sources at regular intervals, and basing this work on local factors that may influence the catchment's susceptibility to microbial contamination, the water agency has a good understanding of the extent of microbial hazards associated with their water supply systems. Documenting the method used and the source water assessment findings in the risk management plan is **compliant** with the requirements of rr. 8(2)(b)(i) and 8(2)(b)(ii).

The water agency is aware of the extent of pathogens in all water sources and can determine the efficacy of the applied treatment processes and other controls to ensure microbial hazards are reduced to acceptable levels in the drinking water it supplies. The water agency can provide evidence of the actual operational efficacy of each of its treatment processes in removing and reducing microbial pathogens. Documenting the method used and the water treatment assessment in the risk management plan is **compliant** with rr. 8(2)(b)(i) and (ii).

Case study 9: Quantification of microbial hazards

Comment

If the water agency has not quantified microbial hazards in source waters, or determined the extent of removal by current drinking water treatment processes in its risk management plan, this should be deemed a **major noncompliance** with r. 8(2)(a) and r. 8(2)(b) respectively.

If the water agency has used theoretical values for the extent of removal by the existing drinking water treatment processes in its risk management plan, and has not validated these with a review of operational data, this should be deemed a minor noncompliance with r. 8(2). If assessment has shown that the operational performance and controls do not support the basis of an initial theoretical assessment, and the water agency does not have sufficient interim controls in place to remove or reduce the identified pathogenic microorganisms to acceptable levels of risk, this should be deemed a **minor noncompliance** with r. 8(3)(a)(i).

If future plans proposed by the water agency are not likely to address the deficiencies identified within a reasonable timeframe, an **opportunity for improvement** should be noted in respect of compliance with r. 8(3)(a)(i). Water agencies should be conducting sanitary surveys at regular periods (such as every three to five years) to ensure that information regarding pathogenic microbial risk remains current; not doing so should result in an **opportunity for improvement** being identified. Water agencies should conduct event-based monitoring to ensure all variable conditions are taken into account, ensuring that the extent to which pathogenic microorganisms are present in source water is known; not doing so should result in an **opportunity for improvement** being identified.

Appendix 5: Audit certificate template

Regulation 10

Schedule 1—Risk management plan audit certificate

Safe Drinking Water Regulations 2015

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, [print full name of approved auditor], after conducting a risk management plan audit of the water supplied by [insert name of the water supplier or water storage manager], am of the opinion that—

*[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 noncompliance are—

**insert/attach the details of the reasons for noncompliance*

Date:

*delete if not applicable