Safe Drinking Water Act 2011

Audit / inspection guidance – small bore water supply

This factsheet has been developed by the Department for Health & Ageing (DHA) to provide assistance to approved Level 2 auditors and Level 3 inspectors when auditing small bore water supplies under The *Safe Drinking Water Act 2011* (the Act) and *Safe Drinking Water Regulations 2012* (the Regulations). This fact sheet should be referred to when completing the "Safe Drinking Water Act 2011 Audit / Inspection Report".

Introduction

Audits / inspections are to be performed by persons approved under Section 15 of the Act as Level 2 auditors or Level 3 inspectors. Under section 20 (1) of the Act drinking water providers are subject to audit or inspection every 1 to 2 years depending on the size and complexity of the scheme and the vulnerability of the population supplied. Small, low-risk bore water supplies (e.g. those provided at accommodation premises), bore water supplies at schools and supplies at regulated food premises (supplied to non-vulnerable persons) are subject to inspection once every two years. These can be carried out in conjunction with routine food inspections. Bore water supplies at regulated care premises (including hospitals, aged care facilities and childcare facilities) specified in Section 7(4)(a-e) of the Regulations are subject to annual audit. The scheme for audits and inspections was published in the Government Gazette and is also available on the Safe Drinking Water Act website.

Please note that under the Act process for audit and inspection is the same. Review of the risk management plan and related procedures and records must be undertaken as required by the Act. Inspections are expected to be less comprehensive than audits.

Duties of an Auditor / Inspector

Under section 21 of the Act and Section 10 of the Regulations an auditor or inspector has the following duties:

- To determine whether the drinking water provider has complied with the requirements of part 3 of the Act relating to risk management plans
- To carry out follow up audits / inspections if necessary
- To report on the outcome of the audit / inspection
- To make recommendations as to changes to any component of the RMP and the reasons for such recommendations
- To make recommendations as to any other matters that require improvement or remedial action or are otherwise of concern to the auditor or inspector
- To determine whether any remedial action has been taken by the drinking water provider in relation to circumstances of non-compliance

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The Audit / Inspection

The following section provides explanatory notes for each question within the *Safe Drinking Water Act 2011 Audit / Inspection Report* for bore water supplies

Implementation and Review of Risk Management Plans (RMPs)

1. Is there evidence that a drinking water RMP has been implemented?

Under Section 12 of the Act a drinking water provider must prepare and implement a risk management plan. In most cases this requirement can be met by adopting a standard RMP (see below).

2. Has a standard RMP been adopted?

Standard risk management plans have been developed by DHA for small bore water supplies and rainwater supplies with bore water backup. These can be accessed from **www.sahealth.sa.gov.au/safedrinkingwateract**.

3. Has the RMP been revised where revision was found to be required as a result of internal review or the previous audit / inspection?

Under section 21 of the Act, auditors and inspectors are required to identify any deficiencies in the RMP. Under section 12 (1) of the Act the drinking water provider must revise any aspect of the RMP that requires revision.

RMP Content

4. Are all sections of the RMP complete?

Under section 13 (1) of the Act a risk management plan should include:

- a detailed description of the system of supply
- Identified risks to that have the potential to impact on the quality of water provided
- An assessment of the identified risks
- Preventative measures adopted to manage the risks
- A monitoring program outlining testing and monitoring requirements to maintain and verify a safe drinking water supply
    - In the standard RMP this is split into 2 sections- operational monitoring and verification monitoring
- Incident identification, notification and response procedures
- Maintenance schedules for the drinking water supply

If a standard RMP has been adopted all sections of the standard RMP template should be filled in. Custom RMPs must contain each of the above sections.

5. Is the level of detail adequate for the size and complexity of the supply?

This factsheet deals with the inspection of small bore water supplies. For more complex systems that include multiple source waters or extensive treatment, this inspection fact sheet is not appropriate.

Questions to consider include:

- Is the description of the supply complete and accurate?
- Have all hazards and risks that have the potential to impact on drinking water quality been identified? Potential hazards may include:
    - Livestock entry to bore protection zone
    - Leakage from sewage collection system
    - Toxic chemicals leaching into groundwater
    - Poorly maintained tank (if present)
    - Refer to the standard RMP for small bore water supplies for additional potential hazards
- Is the monitoring and testing plan adequate? E.g.
    - Operational monitoring i.e. inspection and maintenance of the bore and bore protection zone should be undertaken at least once a month.
    - Other aspects of the drinking water system should be inspected and maintenance performed at least every 6 months i.e. Internal tank inspection and maintenance.
    - Verification monitoring for *E. coli* should be undertaken every 3 to 12 months. Chemical monitoring should be undertaken at least every 2 years. Refer to standard RMPs for suitable monitoring frequencies.

6. Is there evidence that a hazard identification and risk assessment process has been carried out?

General hazards associated with bore water supplies have been identified in the standard RMPs. In some instances, additional, supply specific hazards may be present that require identifying and managing.

7. Is there evidence that preventative measures have been established and are in operation to manage all risks?

Preventative measure are established and undertaken to manage risks. Refer to the RMP to ensure preventative measures have been identified. Copies of monitoring records should be sighted to ensure preventative measures are operating. Examples include:

- A 50m protection zone is maintained around the bore
- The bore head is sealed and protected from surface water ingress

Records Management

8. Is there evidence all operational monitoring has been performed?

Evidence of operational monitoring should be in the form of records and results of monitoring. This should be undertaken at a frequency as outlined in the RMP. Records must be kept for 5 years.

9. Is there evidence all verification monitoring has been performed?

For small bore water supplies *E. coli* monitoring should be undertaken every 1 to 12 months depending on the supply. Chemical monitoring should be undertaken at least every 2 years. The frequency of monitoring should appear in the RMP. The frequency should be confirmed by viewing the DHA approved testing frequency as outlined in the drinking water provider's approval letter. Under Section 9 (5) of the Regulations, *E. coli* and chemical monitoring results must be kept for 5 years.

Under Section 9(4)(b)(ii) of the Regulations, results of testing must be furnished to the Department within 21 days after the completion of the audit or inspection. For regulated care premises a copy of testing results must be attached to the submitted audit or inspection report. For other premises, the results table on page 5 of the audit/inspection report can be filled in as an alternative to attaching copies of results.

Under section 25 of the Act and Section 13 of the Regulations testing must have been undertaken by a NATA accredited laboratory.

10. Are records maintained for corrective actions taken where preventative measures have failed?

Corrective actions must be outlined for failures in preventative measures. For example if during routine monitoring livestock was found grazing around the bore, the corrective action should be to remove the livestock and prevent future access. All records of where corrective actions have been implemented for failures in preventative measures that are "non-incidents" should be available to view.

11. Have any incidents or *E. coli* or chemical exceedances occurred within the inspection period and were they reported to DHA?

Under section 13 of the Act all RMPs must include an incident identification and notification protocol. The incident identification and notification protocol outlines events that if occur would constitute a potential risk to health and require remedial action and notification of the DHA. Detection of any *E. coli* or health related chemicals at levels above guideline values (an exceedance) at the point of use constitutes an incident and must be reported to DHA. Refer to the incident identification and notification protocol for supply specific incident notification requirements.

12. Is there evidence that remedial action was taken?

Are records available outlining the remedial action taken? Did follow up sampling indicate the risk was managed? For a microbiological incident (*E. coli* detection) remedial action would include chlorinating the tank (if present) in addition to identifying and correcting the reason for the exceedance (i.e. removal of cows grazing around bore).

13. If applicable, has the RMP been updated to prevent future incidents?

Under section 12 of the Act the drinking water provider must revise any aspect of the RMP that requires revision. If on review the RMP requires updating in order to manage newly identified risks and prevent future exceedances this should be undertaken.

Visual Inspection

14. Perform an inspection of the drinking water system from catchment to tap. Is the system operating in accordance with the RMP?

Under section 21 of the Act the auditor / inspector must determine whether the drinking water provider has complied with the RMP. This includes ensuring that the drinking water system is being maintained and that identified risks have been managed in accordance with the RMP. During the inspection you should visually confirm this. Visual inspection includes ensuring that:

- The bore protection zone is free from any potential sources of contamination
- The bore head is water-tight and protected from surface water flows
- Any treatment i.e. UV disinfection (if present) is operational and well maintained.

If visual inspection identifies any deficiencies in compliance with the RMP the drinking water provider must take action to remedy this. The inspector must then under section 21 of the Act carry out a follow up audit or inspection to confirm that action has been taken.

Under no circumstances should you put yourself under any danger during the visual inspection.

Recommendations

Using the information and answers to the checklist questions have any non-compliances in the RMP been identified? These should be listed and described in the recommendations table on page 4 of the audit / inspection report. Non-compliances must be followed up by a date made in consultation with the drinking water provider and the DHA Water Quality Unit.

Reporting requirements

Section 10 of the Regulations requires this report to be provided to DHA within 21 days after the completion of the inspection. Additional information may be requested by DHA as required. The inspection form can be mailed via the address below or emailed to waterquality@health.sa.gov.au. A copy of the inspection report as provided to DHA must also be provided to the drinking water provider under section 22 (6) of the Act.

Water Quality Unit
Department for Health and Ageing
PO Box 6, Rundle Mall
ADELAIDE SA 5000

If as a result of this inspection, you are concerned that the drinking water may be unsafe, you must report your concerns immediately to DHA on 8226 7100 during business hours or 1300 558 657 outside of business hours. This is a requirement under section 22 (4) of the Act.