10

Documentation and record keeping

This chapter summarises the content of a water safety plan document and also outlines the record keeping that will form part of its implementation. Documentation and records are essential for reviewing the adequacy of the water safety plan and the adherence of the water supply system to the plan.

10.1 DOCUMENTING THE WATER SAFETY PLAN

Table 10.1 details the proposed content of a water safety plan and, where appropriate, the relevant chapter within this document dealing with that area.

Table 10.1: Proposed content of a water safety plan

Component	Chapter	Must contain	Should contain	May contain
Water safety plan team chart	3	X		
Detailed description of the supply, intended use and vulnerability	3 and 4	X		
Process flow diagram including control measures	4 and 6	X		
Hazard identification	5	X		
Documented corrective actions	8	X		
Source water protection programme		X		
Documented incident procedure	8		X	
Supplier policy documents for supporting programmes	9		X	
Detailed specifications for chemicals and materials used in the water supply			X	
Job descriptions for those holding principal accountabilities for operating the water safety plan			X	
Record-keeping procedures	10		X	
Validation data	11		X	
Procedures for verification and revision	11		X	
Relevant Good Manufacturing Practice manuals (including line hygiene, preventative maintenance, and equipment calibration measurements)				X
Job descriptions and accountabilities for all staff				X
Training programme and records for all staff				X
Laboratory manuals (including calibration procedures)				X
Findings and corrective actions from previous audits (including verification procedures)				X
Customer complaint policy and procedure				X

10.2 RECORD KEEPING AND DOCUMENTATION

In addition to the actual water safety plan there will also be a range of records that will form part of the water safety plan setting up and implementation process as well as monitoring and any necessary corrective actions taken, incident response records, validation and verification. These can essentially be divided into four types of record:

- support documentation for developing the water safety plan;
- records generated by the water safety plan system;
- documentation of methods and procedures used; and
- records of employee training programmes.

Water safety plan system records are kept to demonstrate adherence of the system to the water safety plan. By tracking records generated by the water safety plan system, an operator or manager can become aware that a process is approaching its operational or critical limit (see Chapter 7). Review of records can be instrumental in identifying trends and in making operational adjustments. Periodical review of water safety plan records is recommended so trends can be noted and appropriate actions decided upon and implemented.

Documentation and records systems should be kept as simple and focused as possible. The level of detail in the documentation of procedures should be sufficient to provide assurance of operational control when coupled with a suitably qualified and competent operator.

Mechanisms should be established to periodically review and, where necessary, revise documents to reflect changing circumstances. Documents should be assembled in a manner that will enable any necessary modifications to be made easily. A document control system should be developed to ensure that current versions are in use and obsolete documents are discarded.

Appropriate documentation and reporting of incidents/emergencies should also be established. The organisation should learn as much as possible from an incident to improve preparedness and planning for future events. Review of an incident may indicate necessary amendments to existing protocols, and may suggest that upgrading of the water system is required (see Chapter 11).

10.3 MELBOURNE WATER CASE STUDY -DOCUMENTATION

For online controls of chlorine dosing and plant operation, real time information is collected on a SCADA (Supervisory Control and Data Acquisition) telemetry system. Plant log records are kept by water supply operators and include documentations such as:

- calibration records;
- plant maintenance reports; and
- manual verification of plant performance.

Other documentation that arises from disinfection for Melbourne Water includes:

- reporting of deviation of critical limits to the Department of Human Services and the retail water companies;
- reporting of annual performance in the Melbourne Water annual report;
- on-going reporting to executive and Board members of disinfection performance; and
- internal and external auditing for the Melbourne Water Quality Management System which includes Hazard Analysis and Critical Control Point (HACCP) and ISO 9001:2000. This involves the generation of audit reports, improvement notices and actions.

10.4 KAMPALA CASE STUDY - DOCUMENTATION

The principal document to support the water safety plan is a water safety plan operational guide for the water quality control department and a range of tools for use by water quality, water production and operational staff. This also includes documentation of the risk assessment and documents and tools for engaging with communities regarding community-based actions to improve water quality. A code of hygienic working is also available. In addition, all treatment works have appropriate operational manuals.

Internal auditing of water safety through regular monitoring and verification is also practiced. A regular dialogue is maintained with the Ministry of Health and Directorate of Water Development to ensure transparency in the water safety management plan.