



# Model Drinking Water Quality Management Plan

## 1 General information

### 1.1 System Layout

Provide the address of the system and a layout diagram for the system. The following must be indicated on the layout diagram:

- Location where the water is harvested/abstracted;
- Storage apparatus;
- Treatment apparatus;
- Reticulation network; and
- System schematic layout.

### 1.2 Duty of care holder

Provide the contact details for the personnel whom have the duty of care to provide safe water for the intended purposes.

### 1.3 Water users

Provide details of the population using the water and the scope of the contractual agreement (if any).

## 2 Drinking water supply system information

### 2.1 Water harvesting / abstraction sources and methods

Provide details on the point sources of drinking water harvesting/abstraction, source identification codes, method of harvesting/abstraction and the estimated volume of water that will be harvested /abstracted.

### 2.2 Storage system

Provide the following details on the storage system:

- Details of storage tank;
- Security (accessibility to public);
- Turnover time;
- Properly sealed? (accessibility to animals/insects);
- Maintenance; and
- Structure soundness (Australian Standards compliance).



## 2.3 Treatment system

Provide details of the treatment system that will be used to treat the water. Discuss the validation of treatment efficacy to remove contaminants from raw water. Include details of alternative treatment systems that will be used in an event of primary treatment system failure.

An initial raw water quality assessment of the assessable characteristics is required (Refer to Small Community Model Assessable Sampling Grid). Refer to Section 4.

## 2.4 Reticulation network

Map out the zones of the drinking water system.

## 2.5 Systems operation

Describe briefly the systems operation from source to reticulation.

## 2.6 Operational monitoring and maintenance

Provide details on the operational monitoring and maintenance of all the major apparatus within the drinking water system. Provide the following details:

- Availability of operational monitoring and maintenance manual / procedures / checklists;
- Personnel in-charge of operational monitoring and maintenance; and
- Operational monitoring and maintenance frequencies.

## 2.7 System operators competency

Provide details on the competency of personnel that will operate the system.

## 2.8 Materials and Substances in contact with drinking water

Ensure all chemicals, products and any substances that come in contact with the water are AS/NZS 4020:2005 compliance or DoH approved. Refer to the “Materials and Substances in Drinking Water” publication.

# 3 Catchment

## 3.1 Map of catchment area

Provide a map of the catchment area. The map should indicate the following items:

- Area where the water is harvested;
- Extent of the recharge area;
- Hydrological flow;
- Location of risks (possible sources of contamination); and
- Bore head / Reservoir protection zones.



### 3.2 Risk assessment of catchment area

Provide details of the risk assessment of the catchment area identifying all the possible sources of contamination that can be introduced into the system. The following items must be included in the assessment:

- Risks;
- Hazards;
- Management priority (High, Medium, Low);
- Consideration for management;
- Current preventative measures; and
- Recommended protection strategies.

### 3.3 Catchment monitoring and maintenance

Provide the details on how the catchment will be monitored and maintained to ensure the detection and removal of any contamination.

## 4 Monitoring requirements

Refer to the “Minesites and Exploration Camps Drinking Water Quality Monitoring Requirements” factsheet and the “Small Community Model Assessable Sampling Grid” for the requirements on the drinking water quality monitoring program.

Before the system is approved, a full assessment of all the characteristics listed on the sampling grid needs to be reviewed by the Department of Health. Exemptions for some characteristics can be given if objective evidence can demonstrate the negligibility of risk for the characteristics.

## 5 Incidents response procedure

A risk assessment needs to be conducted on the system as well as the catchment. The system risk assessment should include all possible incidents that will affect the water quality. The following items should be addressed in the incident response procedure:

- Incident giving rise to hazard;
- Possible causes;
- Consequences;
- Risk (Likelihood and consequence);
- Response action and Personnel in-charge;
- Reporting protocols; and
- Preventative measures.

## 6 Reporting requirements

Refer to the “Systems Compliance and Routine Reporting Requirements for Minesites and Exploration Camps” publication.



## More information

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