



Minesites and Exploration Camps Drinking Water Quality Monitoring Requirements

On 10 July 2008, the State Mining Engineer advised that all mining companies and mining operators who supply drinking water to employees and/or associated communities (minesites), are obliged to:

- Comply with Australian Drinking Water Guidelines 2004 (2004 ADWG), as published by the National Health & Medical Research Council; and
- Provide results of routine monitoring of such water supplies to Department of Health WA (DOH).
- Establish a drinking water quality monitoring program which normally involves chemical and microbiological analysis of the drinking water.

The purpose of this factsheet is to provide Managers of Mines, Exploration Managers and Exploration Contractors registered by the Department of Consumer and Employment Protection with a summary of the monitoring and reporting requirements.

Australian Drinking Water Guidelines 2004

The Australian Drinking Water Guidelines 2004 (2004 ADWG) adopt a preventive risk management approach that captures all aspects of drinking water production from catchment to tap. The degree of risk management required depends on the source of the water, the size and complexity of the distribution system and the number of consumers. Copies of the 2004 ADWG can be downloaded from the National Health and Medical research website

<http://www.nhmrc.gov.au/publications/synopses/eh19syn.htm>

Your Duty of Care

As a registered mining company or operator you have a duty of care to demonstrate that you provide safe drinking water. However, the level of monitoring and reporting depends upon the following criteria:

Criteria A: Minesites that are connected to a 2004 ADWG compliant reticulated scheme supply with no air breaks or storage prior to reticulation and consumption;

Routine monitoring and reporting is not required providing:

- All materials and substances in contact with drinking water comply with Australian Standard AS 4020 and are installed by a licensed plumber; and
- No air breaks occur in the reticulation system downstream from the point of supply.

(Note: This system is pressurized by the licensed scheme service provider.)



Criteria B: Minesites that are connected to a 2004 ADWG compliant reticulated scheme supply with air breaks or storage prior to reticulation and consumption;

The following requirements must be met:

- Monthly microbiological monitoring (Thermotolerant coliforms (or E.coli) and Amoeba); and
- Reporting in accordance with the DoH publication “Systems Compliance and Routine Reporting Requirements for Minesites and Exploration Camps”.

Chemical quality monitoring is not required providing:

- All materials and substances in contact with drinking water comply with Australian Standard AS 4020 and are installed by a licensed plumber; and
- It can be demonstrated that a management program is in place to prevent in system contamination (backflow) on site.

Criteria C: Minesites utilising a 2004 ADWG compliant reticulated scheme supply carted or tanked onto site for either direct or reticulated distribution and consumption;

The following requirements must be met:

- Ensure carted drinking water is sourced from a 2004 ADWG compliant scheme supply;
- Water carting company complies with the DoH publication “Guidelines for the Bulk Cartage of Drinking Water”;
- Monthly microbiological monitoring (Thermotolerant coliforms (or E.coli) and Amoeba); and
- Reporting in accordance with the DoH publication “Systems Compliance and Routine Reporting Requirements for Minesites and Exploration Camps”.

Chemical quality monitoring can be exempted if:

- All materials and substances in contact with drinking water comply with Australian Standard AS 4020 and are installed by a licensed plumber; and
- It can be demonstrated that a management program is in place to prevent in system contamination (backflow) on site.

Criteria D: Minesites using onsite or self managed water abstraction, collection systems for reticulation, distribution and consumption.

The following requirements must be met:

- Formal advice must be submitted to the Water Unit of the DoH.
- Establish Drinking Water Quality Management Plan in accordance with the DoH publication ‘Model Drinking Water Quality Management Plan’.
- Establish monitoring program as per “Small Community Sampling Grid”; and
- Reporting in accordance with the DoH publication “Systems Compliance and Routine Reporting Requirements for Minesites and Exploration Camps”.



More information

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