



WATER AND RIVERS
COMMISSION

Water Quality
Protection
Guidelines No. 25

Waste management
of kennel operations
within the Jandakot
UWPCA

1998

WATER AND RIVERS COMMISSION

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Foreword

The Water and Rivers Commission (the “Commission”) is responsible for the “conservation, protection and management of Western Australia’s (land-based) water resources”. The Commission’s mission is to “manage the water resources of Western Australia for the benefit of present and future generations in partnership with the community”.

The Commission recognises that it has a responsibility to clearly state its role, objectives and requirements to those who undertake activities that may impact on the State’s water resources; those who may be affected by such impacts; and those who must plan for or regulate such activities.

To achieve this task, the Commission is developing a series of documents which will establish its position and provide guidance in water quality management issues to interested parties.

This guideline document is one of a series being prepared by the Commission and forms part of the following hierarchy of documentation:

- **Policy and strategy documents** set out the Commission’s statutory, philosophical and operational approaches to the following activities:
 - (i) *Water resources investigation and information;*
 - (ii) *Water allocation; and*
 - (iii) *Resource protection and enhancement.*

Guidelines aim to address the key issues relating to industrial, commercial and urban activities which interact with the Commission’s water resources conservation and management role, and provide advice on best management practices.

The guidelines are seen as negotiable documents which the Commission will seek to enhance or amend on the basis of experience whilst maintaining the basic principles outlined in its policy and strategy documents.

The Commission welcomes the views of readers of these documents and will incorporate constructive comments in periodic upgrades of the guidelines.



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1. Introduction

The Jandakot Underground Water Pollution Control Area (UWPCA) was proclaimed in 1975 for the protection of the groundwater source known as the Jandakot Mound. This water source provides a substantial contribution to the Perth metropolitan water supply system and it is therefore essential that the source is protected from contamination.

The Canning Vale and Banjup areas, within the Jandakot UWPCA, have had existing kennel operations for a number of years. In recognition of the existing land use, the Water and Rivers Commission has developed, in co-operation with the kennel owners of Canning Vale and Banjup, waste disposal and management guidelines for the areas. The disposal of dog waste within Underground Water Pollution Control Areas carries the risk of contamination of an important groundwater resource used for domestic and public drinking water supplies. Groundwater contamination can potentially occur through the disposal of both solid and liquid dog wastes and the use of large volumes of particular cleaning and pet care products.

2. Regulatory requirements

Development approval must be obtained from the local government authority.

The quality of groundwater resources used for public water supply in the Perth Metropolitan Area is protected by proclaiming Underground Water Pollution Control Areas (UWPCAs) over groundwater resources under the *Metropolitan Water Supply, Sewerage and Drainage Act 1909*.

The by-laws under this Act enable the Water and Rivers Commission to control potentially polluting activities, inspect premises and to take steps to prevent or clean up pollution.

In UWPCAs, the Commission has defined three levels of priority protection as follows:

Priority 1

(P1) source protection areas are defined to ensure that there is no degradation of the water source. P1 areas are declared over land where the provision of the

highest quality public drinking water is the prime beneficial land use. P1 areas are managed in accordance with the principle of risk avoidance.

Priority 2

(P2) source protection areas are defined to ensure that there is no increased risk of pollution to the water source. P2 areas are declared over land where the provision of public water supply is a high priority. P2 areas are managed in accordance with the principle of risk minimisation.

Priority 3

(P3) source protection areas are defined to minimise the risk of pollution to the water source. P3 areas are declared over land where water supply needs co-exist with other land uses such as residential, commercial and light industrial developments. Protection of P3 areas is achieved through management guidelines rather than restriction on land use.

In addition to priority classifications, wellhead protection zones are defined to protect the water source from contamination in the immediate vicinity of production wells. Wellhead protection zones are usually circular, with a radius of 500 m in P1 areas and 300 m in P2 and P3 areas.

3. Purpose

The guidelines are designed to minimise the risk of groundwater contamination from kennel operations within the Jandakot Underground Water Pollution Control Area by providing guidance on the management of dog waste disposal to kennel operators, local government authorities and other regulatory authorities.

4. Scope

The guidelines apply to the established, designated subdivisions zoned for kennel operations within Priority 2 areas of the Jandakot Underground Water Pollution Control Area. The guidelines are designed to encourage existing operations and manage new establishments in such a way as to ensure there is no increased risk of contamination to the groundwater source.



5. Guidelines

It is recognised that the capture of all kennel waste is not feasible, as dogs are not always kept within sealed kennel enclosures and urine is likely to be deposited within unsealed exercise areas. Liquid waste, as defined under these guidelines, refers to liquid waste deposited by the dogs within sealed kennel enclosures. Solid waste, as defined under these guidelines, refers to all solid waste generated at the kennel property.

5.1 General

1. Details of any proposed new kennel operation or the expansion of an existing kennel operation shall be submitted to the local government authority for approval.
2. All applications for new operations or expansions of existing kennel operations that will result in more than
 - a) 50 dogs being kept on the property in the Canning Vale kennel zone; or
 - b) 100 dogs being kept on the property in the Banjup kennel zoneshall be referred by the local government authority to the Water and Rivers Commission for permit approval.
3. No retrospective implementation of these guidelines will occur for existing small operations (6 - 50 dogs and 3 - 100 dogs in Canning Vale and Banjup, respectively). However, the Water and Rivers Commission encourages existing operations to conform with the guidelines, where practical, to assist in the protection of the Jandakot drinking water source and to protect your own private water supply.
4. Existing large operations (more than 50 dogs and 100 dogs in Canning Vale and Banjup, respectively) shall require Water and Rivers Commission permit approval under the condition that all solid waste is removed off-site.

5.2 Septic system siting

All septic systems shall be located at least 100 m from any Water Corporation production bore and at least 30 m from any domestic bore.

5.3 Septic system maintenance

All septic systems shall be maintained in good working order and meet all relevant local government authority requirements.

5.4 Animal waste disposal

1. All kennel operations
 - a) in the Canning Vale kennel zone with 6 - 50 dogs on the property at any time; or
 - b) in the Banjup kennel zone with 3 - 100 dogs on the property at any time

shall dispose of all liquid kennel waste through the septic system and dispose of all faecal material and other solid wastes (including uneaten feed) off-site by a local government authority approved waste disposal method.

2. All kennel operations
 - a) in the Canning Vale kennel zone with more than 50 dogs on the property at any time; or
 - b) in the Banjup kennel zone with more than 100 dogs on the property at any time

shall develop a waste management plan, including a monitoring program, that is approved by the local government authority and the Water and Rivers Commission. The objective of the management plan is to ensure recharge water quality, averaged across the lot, is within NH&MRC/ARMCANZ drinking water guidelines.

3. All existing operations within the Canning Vale and the Banjup kennel zones are encouraged to employ off-site disposal of their solid waste to assist in the protection of the Jandakot groundwater source.



4. It is recommended that unsealed exercise areas be grassed to reduce the potential for nitrogen to be leached to the groundwater.

5.5 Disposal of cleaning and pet care waste water

1. All kennel floor washings shall be directed to the septic system.
2. A device shall be fitted to trap intractable solids (such as dog hair) from entering the septic system.
3. All solids collected by this device shall be disposed of off-site by a local government authority approved waste disposal method.

5.6 Surveillance

1. It is recommended that annual inspections of all kennel operations in the Canning Vale and Banjup kennel zones are performed by the appropriate local government authorities.
2. It is recommended that local government authority inspectors examine:
 - a) properties that have been approved under these guidelines for compliance; and
 - b) existing properties and encourage compliance with the guidelines where practical.
3. All kennel operations
 - a) in the Canning Vale kennel zone with more than 50 dogs on the property at any time; or
 - b) in the Banjup kennel zone with more than 100 dogs on the property at any time

shall be inspected annually by a Water and Rivers Commission representative. The inspection will ensure compliance with permit conditions.



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Glossary

Large Operation	Means a property in Canning Vale with greater than 50 dogs or a property in Banjup with greater than 100 dogs.	Priority 3 Water Source Protection Area	(P3) source protection areas are defined to minimise the risk of pollution to the water source.
Liquid Waste	Means liquid waste deposited by the dogs within sealed kennel enclosures.	Small Operation	Means a property in Canning Vale with between 6 and 50 dogs or a property in Banjup with between 3 and 100 dogs.
NH&MRC/ ARMCANZ Drinking Water Guidelines	National Health and Medical Research Council/ Agricultural and Resource Management Council of Australia and New Zealand drinking water guidelines (1996).	Solid Waste	Means all solid waste generated at the kennel property
Priority 1 Water Source Protection Area	(P1) source protection areas are defined to ensure that there is no degradation of the water source.	Underground Water Pollution Control Area (UWPCA)	UWPCAs are Public Drinking Water Source Areas proclaimed over groundwater areas designated for current and future drinking water supplies in the Metropolitan Area.
Priority 2 Water Source Protection Area	(P2) source protection areas are defined to ensure that there is no increased risk of pollution to the water source.	Wellhead Protection Zone	Wellhead protection zones are defined to protect the water source from contamination in the immediate vicinity of production wells. Wellhead protection zones are usually circular, with a radius of 500 m in P1 areas and 300 m in P2 and P3 areas.



Further enquiries

Any project where the proponent/operator is unable to comply with these guidelines, or where site conditions prevent the application of these guidelines, should be submitted to the Commission as early as possible in the development of the proposal so that the matter may be resolved.

Any enquiries relating to the content of these **guidelines** should be directed to:

JADE COLEMAN
ENVIRONMENTAL ENGINEER
WATER AND RIVERS COMMISSION
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For further enquiries on any matter relating to the **management of water resources in the region**, please contact the following Water and Rivers Commission's regional office.

Swan Region
207 Star Street
Welshpool WA 6106
Telephone (08) 9362 0516
Facsimile (08) 9362 0500



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Water Quality Protection Guidelines No. 1 1997

Planning and management of mine dewatering

Water Quality Protection Guidelines No. 2 1997

Tailings storage facility management

Water Quality Protection Guidelines No. 3 1997

The use of liners for chemicals, waste residue and wastewater containment

Water Quality Protection Guidelines No. 4 1997

The construction of groundwater monitoring bores

Water Quality Protection Guidelines No. 5 1997

Minesite water quality monitoring

Water Quality Protection Guidelines No. 6 1997

Minesite stormwater management

Water Quality Protection Guidelines No. 7 1997

Management of mechanical workshop wastes

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