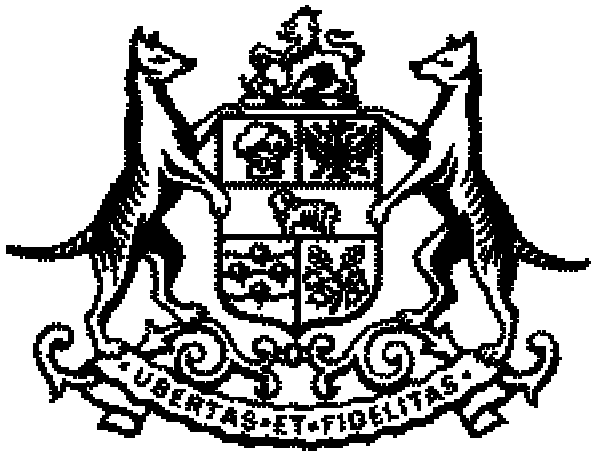

STATE POLICY ON WATER QUALITY MANAGEMENT 1997

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PART 1 - PRELIMINARY

1. Authority

1.1

This State Policy is prepared pursuant to the *State Polices and Projects Act 1993.*

2. Policy to bind the Crown

2.1

This Policy binds-

(a) the Crown in right of Tasmania and, so far as the legislative power of Parliament permits, in all its other capacities unless it is specified in this Policy that it or part of it does not bind the Crown; and

(b) a council unless it is specified in this Policy that it or part of it does not bind the council.

3. Application

3.1

This Policy applies to all surface waters, including coastal waters, and groundwaters, other than:

(i) privately owned waters that are not accessible to the public and are not connected to, or flow directly into, waters that are accessible to the public;

or

(ii) waters in any tank, pipe or cistern.

4. Definitions

4.1

In this Policy, unless the contrary intention appears:

"accepted modern technology":	means technology which has consistently demonstrated achievement of the desired effluent pollutant levels in economically viable situations, takes account of engineering and scientific developments in economically viable operations and pursues opportunities for waste minimisation. (from the National Water Quality Management Strategy - 'Policies and Principles - A Reference Document')
"acid drainage":	means drainage or seepage which is highly acidic (often containing elevated levels of various metals due to contact with oxidising sulphide minerals such as pyrite).

"acute toxicity":	means toxicity which causes a rapid adverse effect in an organism following short-term exposure.
"agency":	means: (a) a department or other agency of government of the State or of the Commonwealth; or (b) an authority of the State or of the Commonwealth established for a public purpose; or (c) a planning authority; or (d) the Local Government Association of Tasmania; or (e) any other person undertaking a function for the public benefit *(State Policies and Projects Act 1993).*
"agri-business":	means a business with a commercial focus which provides services to agriculture and/or value adding to agricultural products.
"ambient environment":	means the general environment which surrounds living organisms and forms part of the ecosystem.
"attenuation zone":	means a three dimensional area of land, soil and rock within which it is recognised that the water quality objectives for the groundwater present in that land may not be achieved.
"Australian Water Quality Guidelines"	means the '*Australian Water Quality Guidelines for Fresh and Marine Waters*' November 1992, published by the Australian and New Zealand Environment and Conservation Council.
"best practice environmental management":	means the management of an activity to achieve an ongoing minimisation of the activity's environmental harm through cost effective measures assessed against current international and national standards applicable to the activity. (*Environmental Management and Pollution Control Act 1994*).
"Board":	means the Board of Environmental Management and Pollution Control. (*Environmental Management and Pollution Control Act 1994*).
"coastal waters":	means that part of the sea that is, from time to time included in the coastal waters of the State by virtue of the *Coastal Waters (State Powers) Act 1980* of the Commonwealth (*Environment Protection (Sea Dumping) Act 1987*).

“chronic toxicity”:	means toxicity which results in adverse physiological effects in exposed organisms which appear slowly and persist for long periods following frequent, prolonged, repeated or continuous exposure to a toxicant.
“diffuse source pollution”:	means pollution which enters the receiving waters via a number of entry points, or arises from a large number of dispersed sources.
“domestic purpose”:	means personal use for drinking, cooking and washing, but does not include water to be used in carrying on a business unless it is for the personal use of persons employed in the business (*Water Management Act 1999*).
“draw-down zone”:	means the area surrounding a well or bore in which the groundwater table is depressed due to pumping from the well or bore.
"environmental harm":	means any adverse effect on the environment (of whatever degree or duration) and includes an environmental nuisance. (*Environmental Management and Pollution Control Act 1994*)
“groundwater”:	means any water contained in or occurring in a geological formation.
“homestead supply”:	means the taking of water from a watercourse or lake as of right under Section 48(2) of the *Water Management Act 1999*, or groundwater, for a domestic purpose.
“karst”:	means formations of limestone or dolomite characterised by structures such as underground drainage systems, caves, and sinkholes.
“Level 1 activity”:	means any activity which may cause environmental harm and in respect of which a permit is required under the *Land Use Planning and Approvals Act 1993*, but does not include a Level 2 or a Level 3 Activity. (*Environmental Management and Pollution Control Act 1994*).
“Level 2 activity”:	means an activity which is specified in Schedule 2 of the *Environmental Management and Pollution Control Act 1994*.
“Level 3 activity”:	means an activity which is a Project of State Significance under the *State Policies and Projects Act 1993*.

"marine farming": means the farming, culturing, ranching, enhancement and breeding of fish or marine life for trade, business or research. (*Marine Farming Planning Act 1995*).

"mixing zone": means a three dimensional area of the receiving waters around a point of discharge of pollutants within which it is recognised that the water quality objectives for the receiving waters may not be achieved.

"net environmental risk": means the summation of the risk of all aspects environmental harm (within the meaning of the *Environmental Management and Pollution Control Act 1994)* which might result from an activity.

"planning authority" : means a municipality or a Marine Board constituted under the *Marine Act 1976* (*Land Use Planning and Approvals Act 1993*), the Secretary of the Department of Primary Industry and Fisheries (*Marine Farming Planning Act 1995*) and the Director of the National Parks and Wildlife Service (*National Parks and Wildlife Act 1970)*.

"point source pollution": means the pollution which is emitted at a discrete, identifiable location, usually via a discharge pipe or outfall, and which can be readily measured.

"potable": means water suitable for drinking and culinary use.

"pollutant": includes:

(a) a gas, liquid or solid; or
(b) an odour; or
(c) an organism (whether alive or dead), including a virus; or
(d) energy, including noise, radioactivity and electromagnetic radiation; or
(e) a combination of pollutants -

that may cause environmental harm within the meaning of the *Environmental Management and Pollution Control Act 1994* ; (*Environmental Management and Pollution Control Act 1994*).

"pollute": means
(a) discharge, emit, deposit or disturb pollutants; or
(b) cause or fail to prevent the discharge, emission, depositing, disturbance or escape of pollutants;
(*Environmental Management and Pollution Control Act 1994*).

"precautionary principle":	means where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by: (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment; and (ii) an assessment of the risk weighted consequences of various options. (*Intergovernmental Agreement on the Environment, 1992)*
"primary contact recreation":	means recreation involving bodily immersion or submersion where there is direct contact with water and includes activities such as swimming, diving, water skiing and surfing. (National Health and Medical Research Council).
"pristine":	means predominantly unchanged by human activities or influences.
"privately owned waters":	means any surface waters confined within the boundary of privately owned land and which do not flow into, or do not communicate with: (a)the sea or any arm or creek of the sea (b)a source of supply for a water district or irrigation water district; (c)any river, stream, watercourse lake pond or marsh.
"protected environmental value":	means the value or use for which it has been determined that a given area of the environment should be protected. There can, and often will be, more than one protected environmental value for a given area. A list of potential protected environmental values is given in clause 7.1.
"recycling":	means the multiple use of a resource in the course of the same production process or other activity.
"receiving waters":	means the waters receiving a discharge of wastewater, runoff or pollutants.

“regulatory authority”:	means an authority which has a statutory power to approve and regulate the environmental effects of an activity or a proposed activity. (For Level 1 activities the regulatory authority will be the relevant planning authority and for Level 2 activities, the Board of Environmental Management and Pollution Control. There are some activities which are neither Level 1 or Level 2 activities and the regulatory authority in such instances may be another Government agency.)
“re-use”:	means any process by which waste from one activity is used beneficially for another use or activity.
“secondary contact recreation”:	means activities in which there is likely to be some direct contact with water, but where it is unlikely that water will be swallowed, and includes paddling, washing, boating and fishing (National Health and Medical Research Council).
“stormwater”:	means water which flows over the surface of the land following precipitation.
"sustainable development":	means managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while- (a) sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and (b) safeguarding the life-supporting capacity of air, water, soil and ecosystems; and (c) avoiding, remedying or mitigating any adverse effects of activities on the environment. (*State Policies and Projects Act 1993*)
“sub-lethal”:	means below the level that causes death.
“surface waters”:	means all waters on the land surface, including both fresh and marine waters e.g. streams, lakes, estuaries, and coastal waters.
“technology-based criteria or standards”:	means criteria or standards equivalent to those which can be achieved using a particular level of technology e.g. accepted modern technology.

"water quality indicators": means an element, compound or characteristic of water, or a biological organism or community living in water, which can be measured and used as an index of water quality.

4.2
Words and expressions used both in this Policy and the *Environmental Management and Pollution Control Act 1994* have in this Policy, unless the contrary intention appears, the same respective meanings as they have in that Act.

PART 2 - OBJECTIVES

5. Purpose of the Policy

5.1
To achieve the sustainable management of Tasmania's surface water and groundwater resources by protecting or enhancing their qualities while allowing for sustainable development in accordance with the objectives of Tasmania's Resource Management and Planning System. (Schedule 1 of the *State Policies and Projects Act 1993*)

6. Objectives of the Policy

6.1
The objectives of this policy are to:

(a) focus water quality management on the achievement of water quality objectives which will maintain or enhance water quality and further the objectives of Tasmania's Resource Management and Planning System;

(b) ensure that diffuse source and point source pollution does not prejudice the achievement of water quality objectives and that pollutants discharged to waterways are reduced as far as is reasonable and practical by the use of best practice environmental management;

(c) ensure that efficient and effective water quality monitoring programs are carried out and that the responsibility for monitoring is shared by those who use and benefit from the resource, including polluters, who should bear an appropriate share of the costs arising from their activities, water resource managers and the community;

(d) facilitate and promote integrated catchment management through the achievement of objectives (a) to (c) above; and

(e) apply the precautionary principle to Part 4 of this Policy.

PART 3 - WATER QUALITY OBJECTIVES

7. Protected environmental values

7.1

Protected environmental values are values or uses of the environment for which it has been determined that a given area of the environment should be protected. Water quality objectives may be set for surface waters and groundwaters in Tasmania by determining which of the following protected environmental values should apply to each body of water.

A. Protection of Aquatic Ecosystems

A1 Surface waters, including estuaries, but not including coastal waters

(i) Pristine or nearly pristine ecosystems

(ii) Modified (not pristine) ecosystems

(a) from which edible fish, crustacea and shellfish are harvested

(b) from which edible fish, crustacea and shellfish are not harvested

A2 Coastal waters

(i) Coastal waters ecosystems

A3 Groundwaters

(i) Groundwater ecosystems

B. Recreational Water Quality and Aesthetics

(i) Primary contact
(ii) Secondary contact
(iii) Aesthetics only

C. Raw Water for Town Drinking Water Supply

D. Raw Water for Homestead Supply

Note: The Director of Public Health advises that all raw water from any surface water source or groundwater source which is to be used for domestic purposes should comply with the Australian Drinking Water Guidelines (NH&MRC &ARMCANZ 1996), at the point of use, regardless of source. The Director of Public Health recommends that drinking water, including water for cooking and bathing, should at least be disinfected before use. Water can be disinfected by holding it at a rolling boil for at least 1 minute.

E. Agricultural Water Uses

(i) Irrigation
(ii) Stock watering

F. Industrial Water Supply

The specific industry type for which the water is to be used must be specified to identify appropriate guidelines. (Australian Water Quality Guidelines for Fresh and Marine Waters, ANZECC 1992)

8. Water quality guidelines

8.1

Water quality guidelines are estimates, based on the best scientific information available, of the levels of indicators which should be met in order to protect an environmental value.

8.2

Guidelines to protect human health should be those recommended by the National Health and Medical Research Council, unless otherwise specified by the Director of Public Health.

8.3

Guidelines to protect values other than human health should be determined by the Board of Environmental Management and Pollution Control on a case by case basis in accordance with the following principles:

(a) Wherever practical and appropriate, guidelines should be based on site-specific information which should be used to supplement the latest edition of the Australian Water Quality Guidelines and any other appropriate and authoritative information.

(b) Where site specific information is not available, the Australian Water Quality Guidelines should be the principal basis for setting guidelines, although these levels may be varied by the Board in the light of any other appropriate and authoritative information.

8.4

The need for regional or site specific information should be prioritised to assist the setting of water quality objectives in Tasmania. The development of guidelines for priority areas should be encouraged and facilitated.

9. Water quality objectives

9.1

Water quality objectives for a specific body of water are the most stringent set of water quality guidelines which should be met to achieve all of the protected environmental values nominated for that body of water.

9.2

Water Quality Objectives are to be used as a measure of the success of strategies and actions required by Part 4 of this Policy for the management of pollution from point and diffuse sources.

9.3

For the purposes of this Policy, Water Quality Objectives do not set regulatory limits.

10. Determining protected environmental values

10.1

Consistent with the purpose of the Policy to protect or enhance water quality, the protected environmental values for specific surface water bodies and coastal waters will be those values and uses listed in clause 7 which exist in respect of those waters at the time that this Policy is implemented in respect of those specific waters.

10.2

Consistent with the purpose of the Policy to protect or enhance water quality, the protected environmental values for groundwaters will be those values and uses listed in clause 7 which are likely to be possible given the level of total dissolved solids, as indicated in Table 1, in the specific groundwater body at the time when this Policy is implemented in respect of that specific groundwater body.

Table 1 Environmental Values and Uses of Groundwater Classified by the Level of Total Dissolved Solids (mg/L)

Category **TDS (mg/L)**	A Less than 1000	B 1000-3500	C 3500-13000	D greater than 13000
Protected Environmental Value				
Drinking Water (1)	*			
Irrigation	*	*		
Industry	*	*	*	
Stock	*	*	*	
Ecosystem Protection	*	*	*	*

" * " Denotes an environmental value which can be achieved given the level of dissolved solids

(1) Where groundwaters have TDS levels below 500 mg/L, TDS levels should be maintained below these levels wherever practicable.

10.3

The values and uses referred to in clauses 10.1 and 10.2 will be determined by agreement between the Board, the planning authorities with jurisdiction over those waters, and, where relevant, the water management authorities with jurisdiction over those waters, provided that the Board has taken all reasonable measures to consult other agencies and organisations having an interest in the body of water or groundwater body about the existing protected environmental values, and has taken account of those views.

10.4

If agreement cannot be reached between the authorities referred to in clause 10.3, the matters in dispute will be determined by the Resource Planning and Development Commission.

10.5

Protected environmental values for specific surface waters, except coastal waters, shall be identified within 5 years of the Policy coming into operation.

10.6

Protected environmental values for specific coastal waters shall be identified by 31 December 2003.

10.7

Protected environmental values for specific groundwaters shall be determined as follows:

(a) by identifying PEVs, in accordance with clause 10.2, at the well-head of existing bores by 31 December 2005;

(b) by nominating interim PEVs, in accordance with clause 10.2, for specific groundwaters, on the basis of PEVs identified at the well-head of existing bores tapping that specific groundwater body, by 31 December 2005;

(c) by nominating interim PEVs, in accordance with clause 10.2, for groundwaters which do not have existing bores, on the basis of Minerals Tasmania groundwater prospectivity data, by 31 December 2005;

(d) by confirming interim PEVs, or collecting appropriate data to enable the determination of PEVs in accordance with clause 10.2, for specific groundwaters at the well-head, as and when the specific groundwater body is tapped;

(e) by confirming interim PEVs, or collecting appropriate data to enable the determination of PEVs in accordance with clause 10.2, for specific groundwaters, where any proposed use or development of land has a significant potential to adversely affect that specific groundwater body or proposes to draw water from that groundwater body, prior to that use or development being approved.

10.8

Protected environmental values for specific surface waters, coastal waters and groundwaters:

(a) shall be shown in a public register established by the Board and shall be posted on the Departmental internet site; and

(b) shall be shown in any strategic planning study developed for marine farming and national parks and reserves; and

(c) may be shown in planning schemes, water management plans, resource management strategies, forest management plans or catchment management plans; and

(d) shall be shown and taken into account, in any strategic planning study (excluding strategic planning plans pursuant to s.66 of the *Local Government Act 1993*) conducted by a planning authority, pursuant to the review of a planning scheme, or pursuant to the amendment of a planning scheme or equivalent planning instrument, where the amendment relates to significant water quality management issues, and

(e) shall be reviewed or designated through a catchment-based consultative process.

11. Setting water quality objectives

11.1

The Board will determine, in accordance with clauses 8.2 and 8.3, the water quality guidelines for key indicators to achieve protected environmental values, and will make available the basis for such determinations. In accordance with clause 9, the Board will use the guideline values to derive water quality objectives.

PART 4 OUTCOMES - ACTIONS TO ACHIEVE WATER QUALITY OBJECTIVES

DIVISION 1 - MEASURES TO ACHIEVE POLICY OBJECTIVES

12. Range of measures to achieve objectives

12.1

In giving effect to this Policy, governments and other decision-makers must examine the most appropriate mix of regulatory measures, economic instruments and communications strategies to achieve the objectives of the Policy.

13. Economic instruments

13.1

Economic instruments which should be considered as possible means of achieving Policy objectives include, accredited licences, taxation relief, rate relief, grants for innovation, and grants to assist community-based groups in areas such as communications.

14. Water allocation

14.1

When issuing or reviewing water rights and other licences or permits which allow water abstraction, diversion or the construction of in-stream impoundments, water management authorities must take account of the likely effects of the proposed action on water quality, and whether it will prejudice the achievement of water quality objectives.

DIVISION 2 - MANAGEMENT OF POINT SOURCES OF POLLUTION

DIVISION 2A - AVOIDING DISCHARGES

15. Avoiding discharges

15.1

A regulatory authority must not authorise a point source discharge of a pollutant to surface waters or groundwaters unless it is satisfied that:

(a) it is not practical to avoid the need for the discharge of wastes by re-cycling or re-use in accordance with clause 16.2; and

(b) land application of the wastewater in an environmentally acceptable and sustainable manner is not practical or would result in a higher net environmental risk than disposal to surface waters or groundwaters; and

(c) any unavoidable discharge will not prejudice the achievement of the water quality objectives for the receiving waters; and

(d) the discharge would not give rise to "pollution" within the terms of the *Groundwater Act 1985*, beyond the boundary of any attenuation zone set in accordance with clause 25 of this Policy.

15.2

Where a discharge is unavoidable, regulatory authorities should exercise their powers to avoid the creation of new point source discharges, and will support the rationalisation of existing discharge points. This should include directing wastes to existing wastewater treatment systems with appropriate treatment capacity unless the regulatory authority is satisfied that this:

(a) is not practical; or

(b) would not result in a lower net environmental risk than a separate means of treatment and disposal of the pollutant.

15.3
When interpreting clause 15.1 in relation to waste discharges to inland waters, regulatory authorities must take account of the higher environmental risk of discharging wastes to inland waters in comparison to coastal waters due to the limited dispersion and dilution available in most inland waters.

DIVISION 2B - SETTING EMISSION LIMITS FOR DISCHARGE TO SURFACE WATERS

16. Key principles for limiting emissions from point sources

16.1
Where a point source of pollution might cause environmental nuisance or material or serious environmental harm, limits should be set on the permissible concentrations and/or loads of pollutants which may be present in discharges to waters from point sources of pollution, and these limits be implemented through permits, authorisations, economic measures, or other instruments as appropriate.

16.2
The limits placed on the discharge of pollutants from point sources must be consistent with the following key principles:

(a) The discharge limits must be set at levels which will not prejudice the achievement of water quality objectives; and

(b) Pollutant discharges to the environment should be reduced to the maximum extent that is reasonable and practical having regard to best practice environmental management, and in accordance with the following hierarchy of waste management, arranged in decreasing order of desirability:

(1) waste avoidance;

(2) recycling/reclamation;

(3) waste re-use;

(4) waste treatment to reduce potentially degrading impacts;

(5) waste disposal.

16.3
Regulatory authorities must not require, in accordance with clause 16.2(b), pollutant reduction measures which can be demonstrated to provide no potential environmental benefit.

17. Use of accepted modern technology

17.1
Consistent with clause 16 the discharge limits for proposed new activities should be set at levels which can be achieved by the use of accepted modern technology, unless lower limits are required to protect recognised water quality objectives.

17.2
Regulatory authorities should require the operators of activities which are being carried out at the time that this Policy is made to reduce waste discharges in accordance with the principles set down in the Policy, and, as far as is reasonable and practical, work towards achieving discharge levels equivalent to those which can be achieved using accepted modern technology. A time frame for existing activities to achieve discharge levels which can be achieved using accepted modern technology should be determined on a case-specific basis having regard to the environmental effects of the discharge and the practicability of reducing emissions.

18. Emission limit guidelines

18.1
The Board may publish emission limit guidelines for common activities which are likely to give rise to point source discharges of pollutants to surface waters.

Such guidelines must:

(a) be consistent with the provisions of this Policy;

(b) define the circumstances in which compliance with the guidelines will not normally prejudice the achievement of recognised water quality objectives;

(c) be developed in consultation with relevant interested parties;

(d) be made available for public comment prior to being published.

18.2
The Board must publish emission limit guidelines for the following activities within 2 years of this Policy coming into operation:

(a) Sewage treatment plants;

(b) Abattoirs and slaughterhouses;

(c) Produce processing industries; and

(d) Intensive animal husbandry.

18.3
If emission limit guidelines have been published in accordance with clause 18.1, regulatory authorities must set discharge limits in accordance with the guidelines unless:

(a) there are case-specific circumstances which are identified as inappropriate for use of the guideline limits; or

(b) the limits specified in the guidelines will not be adequate to protect water quality objectives; or

(c) it can be demonstrated by the operator of the activity that it is not reasonable or practical to comply with the limits specified in the guidelines, and that discharges in accordance with a higher limit will not prejudice the achievement of recognised water quality objectives.

19. Setting discharge limits where Emission Limit Guidelines are inappropriate or not available

19.1
If it is necessary to set emission limits for an activity in accordance with clause 16, but emission limit guidelines have not been published in accordance with clause 18.1, or if clause 18.3 applies, the Board must set the emission limits in accordance with the provisions of this Policy.

19.2
In relation to level 1 activities for which it is necessary to set emission limits under this clause, planning authorities must seek the advice of the Board on the emission limits which should be set, and implement the Board's advice through permit conditions. Where appropriate the Director should exercise the powers under section 24(1) of the *Environmental Management and Pollution Control Act 1994* to allow for adequate time to set emission limits.

20. Mixing zones

20.1
If, after waste reduction in accordance with clause 16.2(b) it is not reasonable or practical to reduce the levels of pollutants in an emission to the levels which would be required to achieve the water quality objectives for the receiving waters at the point of discharge, the Board may designate a mixing zone around the point of discharge.

20.2
Where a mixing zone has been designated, emission limits must be set at levels which will not prejudice the achievement of water quality objectives at or beyond the edge of the mixing zone.

20.3
Mixing zones must be set in accordance with the following principles:

(a) The location and size of the mixing zone must be clearly defined in a permit or other legally enforceable instrument of approval.

(b) The mixing zone must be as small as practical in accordance with the requirements of clauses 16 and 17, and either alone or in combination with other mixing zones, should not occupy a significant proportion of the receiving waters designated for any given protected environmental value.

(c) The presence of the mixing zone, either alone or in combination with other mixing zones, should not detract from the values and uses of the surrounding waters.

(d) Mixing zones should not generally be designated in waters which:

(i) receive significant and regular use for primary contact recreation; or

(ii) are recognised as of significant value as spawning or nursery areas; or

(iii) are close to areas used for aquaculture; or

(iv) are close to potable water supply intakes; or

(v) are of outstanding ecological or scientific importance; or

(vi) for which the protected environmental values include protection of pristine aquatic ecosystems.

(e) Mixing zones must not create a significant barrier to the migration of fish or other aquatic organisms.

(f) Mixing zones designated in rivers, streams and estuaries should be set having regard to the effects of the mixing zone under low flow conditions (7 day minimum flow for a 10 year annual exceedance probability).

20.4
Emission limits shall be set such that, within the mixing zone, the emission does not cause:

(a) objectionable odours which would adversely affect the use of the surrounding environment; or

(b) objectionable discolouration at the surface of the mixing zone, which could adversely affect the use of the surrounding environment; or

(c) visible floating foam, oils, grease, scum, litter or other objectionable matter; or

(d) mortality of fish or other aquatic vertebrates; or

(e) fish or other aquatic organisms used for human consumption to become unacceptable for such use as determined by Tasmanian health standards.

20.5
Where a mixing zone has been designated by the Board in accordance with clause 20.1, the operator shall be responsible for monitoring their effluent(s) for pollutants, and the receiving waters, including baseline monitoring. These responsibilities shall be reflected in the conditions attached to the permit.

21. Toxicity of emissions to aquatic organisms

21.1
Where a mixing zone has been designated in accordance with clause 20, the emission limits should be set at levels which are unlikely to cause chronic or sub-lethal toxicity to living organisms present in the local ecosystem at the dilution expected at the boundary of the mixing zone.

22. Transitional arrangements

22.1
Regulatory authorities should set discharge limits in accordance with this Policy in relation to all point sources of pollution for which they have regulatory responsibility within 5 years of this Policy being made.

DIVISION 2C - SETTING LIMITS FOR DISCHARGES TO GROUNDWATERS

23. Direct discharges to groundwater

23.1

A direct discharge to groundwater is where a pollutant is discharged or deposited directly into groundwater or below the normal upper limit of the water table, including through a well, trench, bore or other excavation.

23.2

Due to the special characteristics of groundwater aquifers, including their hidden nature, large storage volume, slow movement and slow flushing capacity, direct discharges of pollutants to groundwaters shall not be permitted except in the following circumstances:

(a) the return of mineral tailings to mines provided that it can be demonstrated that this practice will not prejudice the water quality objectives for the groundwater aquifer outside of an attenuation zone set in accordance with clause 25 of this Policy, and this is the means of disposing of the tailings which poses the least net environmental risk; and

(b) the use of wastewaters to re-charge aquifers where the quality of the water being discharged is equal to or better than the water quality in the aquifer as measured by key water quality indicators.

23.3

Any permit issued which allows the direct discharge of pollutants to groundwater must:

(a) establish discharge limits which are consistent with the principles established by clause 16 of this Policy,

(b) require monitoring and assessment of wastewater and groundwater quality to test predictions on attenuation and guard against unforseen impacts; and

(c) require the permit holder to undertake measures to restore the quality of contaminated groundwater to achieve water quality objectives if monitoring shows that the discharge is preventing these objectives being met beyond the boundary of any attenuation zone set in accordance with clause 25 of this Policy.

24. Indirect or incidental contamination of groundwater

24.1

The person who is responsible for an activity which has the potential to indirectly cause the contamination of groundwater must ensure that appropriate safeguards are taken to minimise the risk and the extent of such contamination. If an attenuation zone has been designated in relation to the activity, the activity must be managed such that it does not pose a risk to the water quality objectives for groundwater beyond the boundary of the attenuation zone.

24.2
Regulatory authorities should use their powers to require compliance with clause 24.1 and should not approve applications to undertake activities which have the potential to indirectly cause the pollution of groundwater unless the proposal includes, or has attached as a condition of approval, safeguards which are consistent with best practice environmental management to minimise risk and the extent of pollution.

24.3
The Board in conjunction with the principal regulatory authority with responsibility for groundwater should develop and adopt mutually agreed guidelines, or, where appropriate in the light of this Policy, endorse existing guidelines which set out the requirements and standards which will normally be required in relation to activities with the potential to pollute groundwater. Such guidelines shall be developed in accordance with the requirements set out in clause 18.1

25. Attenuation zones

25.1
The Board may designate an attenuation zone in relation to an activity of the type described in clauses 23.2 or 24 only if, after waste reduction in accordance with clause 16.2(b) and the use of best practice environmental management, it is not reasonable or practical to prevent restricted pollution of groundwater in the immediate vicinity of the activity.

25.2
Where an attenuation zone has been designated, the activity must be managed so that the discharge will not prejudice the achievement of water quality objectives at or beyond the edge of the attenuation zone.

25.3
Attenuation zones must be designated in accordance with the following principles:

(a) Attenuation zones shall be as small as possible taking into account the use of all reasonable and practical measures to reduce pollutant discharges.

(b) Attenuation zones shall not be defined:

  (i) within the draw-down zone of any well supplying water for human consumption, stock watering, or the irrigation of crops for human consumption; or

  (ii) within the groundwater catchment of any significant karst feature.

(c) Attenuation zones shall not, either alone or in combination, occupy a significant proportion of an aquifer;

(d) An attenuation zone shall not prevent the achievement or maintenance of water quality objectives in any surface waters fed by the aquifer in which the attenuation zone has been designated.

25.4

Where an attenuation zone has been designated by the Board in accordance with clause 25.1, the operator shall be responsible for monitoring their effluent(s) for pollutants, and the groundwaters, including baseline monitoring. These responsibilities shall be reflected in the conditions attached to the permit.

DIVISION 2D - GENERAL

26. Review of discharge limits

26.1

Regulatory authorities must review the discharge limits applied to point source discharges at intervals not exceeding 5 years and modify the limits as necessary to ensure that they remain consistent with the requirements of this Policy.

27. Environmental emergency management

27.1

Environmental emergency management plans to prevent the pollution of waterways and groundwater, and manage the consequences of any pollution which does occur, should be prepared in respect of activities which use, produce, convey or store significant quantities of materials which could cause environmental harm to waters if released through accidents, malfunctions or spillages.

27.2

The Board in conjunction with other relevant Government agencies and stake-holders, should produce guidelines setting out the types of activities for which environmental emergency management plans to protect surface and groundwaters are required.

27.3

Regulatory authorities shall require the persons responsible for the types of activities identified pursuant to clause 27.2 to prepare environmental emergency management plans, and regularly review such plans.

27.4

When considering the requirement for environmental emergency management plans to meet the objectives of this clause, regulatory authorities shall have regard to the requirements for emergency planning established by other statutes, policies or administrative practices, and, wherever possible ensure that emergency management plans prepared for these purposes also meet the requirements of this clause so as to avoid duplication.

28. Overflows from sewerage systems

28.1

All new and reconstructed sewage pump stations should be designed and operated in accordance with guidelines issued or endorsed by the Board.

28.2

The Board will review '*Design Guidelines for the Minimisation of Pollution from Sewage Pump Station Overflows*' published by the Department of Environment and Planning (1992), taking account of the provisions of this Policy and the guidelines on overflows from sewerage systems published as part of the National Water Quality Management Strategy.

28.3
All reasonable and practical measures must be used to reduce the incidence and effect of overflows from other components of sewerage systems, including sewage treatment plants and existing pump stations.

29. Trade waste policies

29.1
The operators of sewage or wastewater treatment plants which receive significant volumes of industrial wastes should have a trade waste policy to regulate the acceptance of wastes.

29.2
Trade waste policies should be consistent with the *Tasmanian Plumbing Regulations 1994* and the '*Guidelines for the Acceptance of Liquid Wastes to Sewer*' developed by the Institute of Municipal Engineering Australia (Tasmanian Division) and published by the Department of Environment and Land Management (1994), or any review of these guidelines endorsed by the Board.

DIVISION 3 MANAGEMENT OF DIFFUSE SOURCES OF POLLUTION

30. Key Principle for the management of diffuse sources of pollution

30.1
Emissions from diffuse sources of pollution should be reduced and managed through the development and implementation of best practice environmental management, and so as not to prejudice the achievement of water quality objectives.

30.2
The State Government and stakeholders with an interest in an activity with the potential to give rise to diffuse source pollution should jointly develop and maintain guidelines to describe best practice environmental management for that activity, and develop strategies to promote the implementation of the guidelines.

30.3
Guidelines which describe best practice environmental management should be regularly reviewed. The period between reviews should not exceed five years.

31. Control of erosion and stormwater runoff from land disturbance

31.1

Planning schemes should require that development proposals with the potential to give rise to off-site polluted stormwater runoff which could cause environmental nuisance or material or serious environmental harm should include, or be required to develop as a condition of approval, stormwater management strategies including appropriate safeguards to reduce the transport of pollutants off-site.

31.2
Stormwater management strategies required pursuant to clause 31.1 should address both the construction phase and operational phase of the development and use of land and have the maintenance of water quality objectives (where these have been defined) as a performance objective.

31.3
To assist with the preparation of stormwater management strategies, the Board should facilitate the development or adoption of a code of practice or guidelines describing best practice environmental management for the control of erosion and stormwater runoff from construction activities, including roadworks.

31.4
Codes of practice or guidelines required by this Policy in respect of specific activities with the potential to impact on stream-side land should pay specific attention to defining appropriate stream-side buffer strips and acceptable management practices within these strips. Strategies and incentives, including economic instruments, to encourage the retention and/or improved management of streamside vegetation should be investigated.

31.5
Planning schemes must require that land use and development is consistent with the physical capability of the land so that the potential for erosion and subsequent water quality degradation is minimised.

32. Agricultural runoff

32.1
The State Government will facilitate and encourage the development of a code of practice or guidelines to describe best practice environmental management to minimise the impact of stormwater runoff from agricultural land on water quality, and ensure that the farming community has the opportunity to play a key role in the development of such guidelines or codes.

32.2
Governments and agri-businesses should promote the implementation of best practice environmental management for agricultural activities to minimise impacts on water quality.

32.3

The managers of agricultural enterprises shall implement the code of practice or guidelines referred to in 32.1 as a means of complying with the *Environmental Management and Pollution Control Act 1994*. Regulatory authorities should take account of the application of the code when considering enforcement action under that legislation.

33. Urban runoff

33.1

Regulatory authorities must require that erosion and stormwater controls are specifically addressed at the design phase of proposals for new developments, and ensure that best practice environmental management is implemented at development sites in accordance with clause 31 of this Policy.

33.2

State and Local Governments should develop and maintain strategies to encourage the community to reduce stormwater pollution at source.

33.3

Where urban stormwater runoff is prejudicing, or has significant potential to prejudice, the achievement of water quality objectives, councils should prepare and implement a stormwater management plan consistent with the principles and methodology set out in "*Guidelines for Urban Stormwater Management*", publication 10 of the National Water Quality Management Strategy.

33.4

Councils should carry out an assessment of the need for stormwater management plans in respect of stormwater discharges within their jurisdiction, and provide a report on this assessment to the Board within 3 years of the making of this Policy. The assessment should also be reported in the council's annual report.

34. Forestry operations

34.1

To protect and maintain water quality, forest practices as defined in the *Forest Practices Act 1985* should be carried out in accordance with the relevant provisions of the Tasmanian Forest Practices Code and have regard to this Policy.-

34.2

When this Policy has been made the Code should be reviewed to ensure that it is consistent with this Policy.

35. Road construction, maintenance and drainage

35.1

Road construction and maintenance operations will be carried out in accordance with the guidelines or code of practice developed pursuant to clause 31.3 of this Policy, or employ other measures consistent with best practice environmental management, to prevent erosion and the pollution of streams and waterways by runoff from sites of road construction and maintenance.

36. Acid drainage - soils

36.1

The State Government should ensure that a survey is carried out to identify Tasmanian soils and surface geology with the potential to give rise to highly acidic drainage if disturbed or developed.

36.2

Any such areas will be subject to appropriate development controls to prevent acid drainage developing to the extent that it may become a threat to water quality objectives in the short or long term.

36.3

If the survey described in clause 36.1 identifies areas where acid drainage from soils is preventing the achievement of water quality objectives, the appropriate authorities should develop a remediation strategy with the objective of achieving the water quality objectives.

37. Acid drainage - mines

37.1

Regulatory authorities must not approve new mining operations unless they are satisfied that:

(a) the potential for acid drainage generation has been adequately investigated; and,

(b) where there is the potential for acid drainage to develop, the proposal incorporates best practice environmental management to reduce the risk that such drainage will prevent the achievement and maintenance of water quality objectives for designated surface waters or groundwaters.

37.2

Proposals to rework mines presently producing acid drainage should not be approved by regulatory authorities unless they include action, of a nature and scale appropriate to the size of the proposed operation, to reduce the emission or environmental effects of acid drainage.

37.3

As a component of environmental management and rehabilitation obligations, regulatory authorities should require the operators of mines giving rise to acid drainage to manage and rehabilitate:

(a) current and future works, and;

(b) any works that the operator has carried out and which are on a mining lease currently held by that operator;

such that, on abandonment, acid drainage will not prevent the achievement of water quality objectives for designated surface waters or groundwaters. Full compliance with (b) may not be required where the operator can demonstrate that such compliance is not reasonable and practical in view of the length of time since the works were carried out.

37.4
Where reasonable and practical the current operators of mines should also take steps to reduce the volume or environmental effects of acid drainage from historic workings which they have not carried out, but which are on their mining lease. Such action should be voluntary and not mandated by regulatory authorities.

37.5
An inventory of sources of acid drainage from historic abandoned mine workings in Tasmania should be carried out and a remedial program developed to address priority problem areas.

38. Re-use of wastes by land application

38.1
The beneficial re-use of wastewater by land application in an environmentally acceptable and sustainable manner should be encouraged and facilitated.

38.2
Notwithstanding clause 38.1, regulatory authorities should not approve proposals to apply wastes to land unless they are satisfied that this:

(a) can be carried out in an environmentally sustainable manner; and

(b) incorporates the use of best practice environmental management; and

(c) will not compromise the water quality objectives for surface or groundwaters; and

(d) will not give rise to an unacceptable risk to human or animal health; and

(e) involves less net environmental risk than other strategies for dealing with the wastes.

38.3
Existing activities involving the application of wastes to land should be reviewed against the requirements of clause 38.2, and, where necessary a strategy developed to bring the operation into compliance with these requirements.

38.4
The land application of wastewater from sewage treatment plants should be carried out in accordance with '*Guidelines for the re-use of wastewater in Tasmania*' (Department of Environment and Land Management, 1994) and any subsequent reviews of this document, or any other means approved by the Board on the basis that it complies with the provisions of this clause. Any review of these guidelines must take account of this Policy and be consistent with it.

39. Stream management

39.1

The State Government should ensure that guidelines are developed for Tasmania to define best practice environmental management for carrying out modifications to stream channels and banks, including drainage lines.

39.2
Regulatory authorities shall develop criteria for the approval of stream management works and require that any such works are designed and carried out in accordance with best practice environmental management and so as not to prejudice the achievement of water quality objectives.

40. Release of water from storages

40.1
The State Government should ensure that guidelines are developed to define best practice environmental management for minimising the downstream effects on water quality from the release of water from storages.

40.2
The operators of a water storage must ensure that the release of water from the storage does not prejudice the achievement and maintenance of water quality objectives for waters downstream of the storage, and should use best practice environmental management to minimise the effects on downstream water quality.

41. Disposal of sewage and other wastes from ships and boats

41.1
Within Tasmanian waters, raw sewage disposal and other waste disposal from ships and boats should be prohibited wherever this practice has significant potential to adversely affect water quality objectives, including:

(a) from ocean going vessels in ports, estuaries or near shore coastal areas;

(b) from commercial passenger-carrying vessels and fishing boats carrying a specified minimum number of persons in specified port areas, commonly used estuaries, enclosed bays or inland waters;

(c) from any commercial or recreational vessels in waters where the protected environmental values are:

A. Protection of Aquatic Ecosystems
   (i) Pristine or nearly pristine ecosystems
   (ii) Modified (not pristine) ecosystems
      (a) from which edible fish, crustacea and shellfish are harvested

B. Recreational Water Quality and Aesthetics
   (i) Primary contact

C. Raw Water for Drinking Water Supply

41.2

A strategy to ensure acceptable waste disposal practices from boats, including recreational craft will be developed and implemented. The strategy will include, but not be limited, to:

(a) a requirement to fit holding tanks for sewage in all new commercial and recreational craft which are of greater than 20 tonnes displacement; and

(b) the development and implementation of a voluntary code of practice describing best practice environmental management in relation to the disposal of raw sewage and other wastes from boats.

(c) an analysis of the circumstances in which facilities to pump out holding tanks should be installed at wharfs and marinas etc.

42. Marine farming

42.1

Areas designated for marine farming should be chosen such that marine farms are sited and can be operated to provide sustainable environmental outcomes.

42.2

Areas designated for marine farming should be protected from adverse changes in water quality arising from adjacent land based activities or activities in the adjacent coastal area.

42.3

Marine farming operations should be managed and regulated as required to ensure that they do not prevent the achievement of recognised water quality objectives outside of marine farming leases.

43. Discharge of ballast water

43.1

The State Government will continue to actively support the development of a comprehensive national and international strategy to reduce the risk of the introduction and spread of exotic organisms from ballast water discharges through the establishment of a state Ballast Water Management Group.

43.2

In accordance with the National Coastal Ballast Water Guidelines, responsible authorities shall, within 3 years of this Policy coming into operation, prepare Port Management Plans for all Tasmanian ports receiving coastal shipping.

44. Pesticide application in streams

44.1

Any person proposing to use chemicals to control pests (including weeds) in streams or along stream banks should first investigate, and, wherever practical, use non-chemical means of control unless it can be demonstrated that chemical control poses a lesser net environmental risk than other practical options.

44.2

Where chemical control of pests (including weeds) in streams or along stream banks is used in accordance with clause 44.1, the chemicals used must be registered or approved under the Agvet Code of Tasmania and used in accordance with the *Agricultural and Veterinary Chemicals (Control of Use) Act 1996.*

PART 5 MONITORING

45. Responsibility for monitoring

45.1

Monitoring is a critical component of water quality management and authorities responsible for resource management and environment protection should ensure that adequate monitoring is carried out to determine whether water quality objectives are being achieved.

45.2

The responsibility for monitoring should be determined in accordance with the following principles:

(a) The operators of activities which give rise to significant point sources of pollutants have a responsibility to monitor their effluent(s) for pollutants, and contribute to the ambient monitoring of the receiving waters, including baseline monitoring. These responsibilities should be reflected in the conditions attached to permits as and where appropriate. Monitoring requirements should be proportional to the level of environmental risk and, as a secondary consideration, take account of the economic costs of monitoring.

(b) Significant contributors to diffuse source pollution should contribute, directly or indirectly, to ambient monitoring of the receiving waters.

(c) Water resource managers should contribute to baseline monitoring of ambient water quality as a component of their management responsibility and on behalf of water users and beneficiaries.

(d) Community-based monitoring organisations should be incorporated into monitoring programs wherever practical.

46. Co-ordination and Quality Control

46.1

The State Government shall ensure that appropriate mechanisms are in place to co-ordinate ambient water quality monitoring programs to maximise their benefits.

46.2

Monitoring programs should be designed and conducted in such a manner as to facilitate the use of the data collected for State of the Environment Reporting.

46.3

Authorities responsible for carrying out or approving monitoring programs and data storage should ensure that programs meet acceptable standards in terms of quality assurance for the design and conduct of programs, and analysis and storage of results.

47. Public access to data

47.1

Information on the quality of public water resources should be publicly available, and the State Government should facilitate appropriate mechanisms to achieve this objective, including the provision of regular public reports.

48. Use of monitoring data

48.1

Water quality data should be used by resource managers, other decision-makers and the community, to review the extent to which water quality objectives are being achieved, and where they are not, to devise strategies and programs to achieve the objectives.

PART 6 - REVIEW

49. Review of Policy

49.1

This Policy will be reviewed three years after it comes into operation and at intervals of no longer than five years thereafter.

49.2

Implementation of this Policy will be reviewed annually by the Minister.