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Environment Protection Act 1970 *(No.* 8056)

STATE ENVIRONMENT PROTECTION POLICY No. W-25A/26

(The Waters of The Latrobe River Catchment)

At the Executive Council Chamber, Melbourne
the twentieth day of October 1981

PRESENT:

His Excellency the Governor of Victoria
Mr. Dixon Mr. Jenkin
Mr. Wood

Whereas section 16 of the *Environment Protection Act* 1970 provides that the Governor in Council may, on the recommendation of the Environment Protection Authority, declare the environment protection policy to be observed with respect to the environment generally or in any portion or portions of Victoria or with respect to any element or elements or segment or segments of the environment;

And whereas section 17(1) of the said Act provides that in and by any Order made under section 16 the Governor in Council may, for securing the observance of State environment protection policy declared by the Order —

(a) classify any area or any segment or element of the environment in any area for the purposes of the Order;

(b) set aside any area or areas or any segment or segments of the environment within which the discharge, emission, or deposit of wastes or the emission of noise is prohibited or restricted as specified in the Order;

(c) make rules to be observed for carrying any such prohibition or restriction into effect; and

(d) delegate to any protection agency such of the powers of the Authority as are necessary for securing the observance of the Order;

And whereas section 18 of the said Act provides that State environment protection policy declared in any Order under section 16 shall establish the basis for maintaining environmental quality sufficient to protect existing and anticipated beneficial uses in the area affected by the Order and in particular shall include in terms sufficiently clear to give an adequate basis for planning and licensing functions —

(a) the boundaries of any area affected;

(b) identification of the beneficial uses to be protected;

(c) selection of the environmental indicators to be employed to measure and define the environmental quality;

(d) a statement of the environmental quality objectives (where practicable); and

(e) the programme (if any) by which the stated environmental quality objectives are to be attained and maintained;

And whereas in accordance with section 19 of the said Act the Authority caused the publication of its notice of intention to declare State environment protection policy in respect of the waters of the Latrobe River Catchment in the *Age, Sun News-Pictorial* and *Australian* newspapers on 4th March 1978, 5th March 1978 and 25th March 1978; the *Traralgon Journal* newspaper on 2nd March 1978, 13th March 1978 and 23rd March 1978; the *Latrobe Valley Express* newspaper on 8th March 1978, 17th March 1978, and 22nd March 1978; the *Warragul Gazette* newspaper on 7th March 1978 and 21st March 1978; the *Gippsland Times* newspaper on 2nd March 1978, 13th March 1978, 23rd March 1978; and the *Maffra Spectator* newspaper on 8th March 1978 and 22nd March 1978;

And whereas the Authority has now considered the information submitted by various persons;

And whereas more than two months have elapsed since the publication of the last notice published in the aforementioned newspapers;

Now therefore His Excellency the Governor of Victoria by and with the advice of the Executive Council thereof and on the recommendation of the Environment Protection Authority doth by this Order declare the following to be the State environment protection policy to be observed for the area referred to in the Order and with respect to the elements and segments of the environment referred to in the Order (that is to say):

STATE ENVIRONMENT PROTECTION POLICY (WATERS OF THE LATROBE RIVER CATCHMENT) No W-25A/26

1. This Order may be cited as the State Environment Protection Policy (Waters of the Latrobe River Catchment) No. W-25A/26 (hereinafter referred to as the Policy), and shall come into operation upon publication in the *Government Gazette.*

2. This Policy is divided into parts as follows:

Part I — Preliminary
Part II — Boundaries of the Area Affected
Part III — Beneficial Uses to be Protected
Part IV — Water Quality Indicators and Objectives
Part V — Attainment Programme

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Part I — Preliminary

3. In this Policy unless inconsistent with the context or subject matter:

"The Act" means the Environment Protection Act 1970 as amended by any subsequent Acts.

"The Authority" means the Environment Protection Authority constituted under the Act.

"Background level" means the level of an indicator (measured in a manner and at a location specified by the Authority) in the surface waters outside the influence of any waste containing a measurable level of that indicator.

"Beneficial use" means a use of the environment or any element or segment of the environment that is conducive to public benefit, welfare, safety, or health and which requires protection from the effects of waste discharges emissions and deposits or of the emission of noise.

"Delegated agency" means a protection agency to which the Authority has delegated powers or functions under Section 68 of the Act with respect to the grant, refusal or enforcement of licences.

"Disinfection" in relation to potable water supply means disinfection by detention, chlorination or other means.

"Groundwater" means water beneath the land surface which is contained in aquifers.

"Licence" means a licence issued by the Authority or a protection agency on behalf of the Authority being a licence in writing in the prescribed form authorizing the person to whom it is issued to discharge, emit, or deposit wastes into the environment.

"Licensing provisions" means Sections 20 to 31 inclusive in the Act.

"Mixing zone" means an area contiguous to a waste discharge point and designated in a licence for the mixing of wastes with receiving waters.

"Policy area" means the area in which this Policy shall be observed as specified in clause 5.

"Responsible authority" in relation to sewerage means any authority with jurisdiction over the provision of, or requirement for sewerage, including those authorities with control over the subdivision of land.

"Sewered property" means any sewered land or premises and any land or premises which have been declared by a sewerage authority in the manner prescribed by statute to be a sewered property.

"Sewerage" means works for the collection, treatment and disposal of waste water.

"Surface waters" means the surface waters of the Policy area and includes any river, stream, reservoir, billabong, creek, anabranch, canal, spring, open drain, swamp, channel, lake, lagoon, natural or artificial water course, bay, tidal waters or coastal waters, excluding lagoons or pondages used for cooling or waste treatment, waters within water supply distribution systems, farm dams, private ponds and the interstitial waters of sediments.

"Treatment" in relation to potable water supply means disinfection by detention, chlorination or other means and clarification to remove turbidity, colour and suspended solids using processes such as floculation, coagulation, sedimentation or filtration.

"Waste" includes any matter prescribed to be waste and any matter, whether liquid, solid, gaseous or radioactive which is discharged, emitted, or deposited in the environment in such volume, constituency or manner as to cause an alteration of the environment.

4. The purpose of this Policy is to establish a basis for attaining and maintaining a level of water quality sufficient to protect the identified beneficial uses of the surface waters of the Policy area and downstream waters.

Part II — Boundaries of the Area Affected

5. This Policy shall be observed with respect to all surface waters and groundwaters contained within and beneath the Latrobe River Catchment, including the catchments of all tributary streams, extending to, but not including, Lake Wellington. (Map Fig. 1). This area shall hereinafter be called the Policy area.

6. For the purpose of this Policy, the following segments of the environment are classified:

(a) Potable Water Supply Segments — the surface waters of the catchments of:
- (i) the Latrobe River upstream of and including Bennie Creek
- (ii) Camp Creek upstream of its confluence with Latrobe River
- (iii) Deep Creek upstream of its confluence with Latrobe River
- (iv) Loch River upstream of its confluence with Latrobe River
- (v) Toorongo River upstream of its confluence with Latrobe River
- (vi) the Tanjil River upstream of the T4 Dam site
- (vii) the Tyers River upstream of the standby pumping station operated by Latrobe Valley Water and Sewerage Board
- (viii) the Thomson River upstream of Cowwarr Weir
- (ix) the Macalister River upstream of Glenmaggie Weir
- (x) Billy's Creek upstream of the Churchill water supply off-take.

(b) Upper Latrobe Segment — the surface waters of the catchment of the Latrobe River and tributaries upstream of the Yallourn Storage Dam wall, not including those in the Potable Water Supply Segment.

(c) Lower Latrobe River Segment — the surface waters of the Latrobe River between Yallourn Storage Dam and the Sale Swing Bridge.

(d) Coal Area Tributaries — the surface water of the catchments of the southern tributaries of Latrobe River between Yallourn Storage Dam and Rosedale except those of the catchment of Morwell River upstream of, and including Middle Creek, and those of the catchment of Traralgon Creek upstream of, and including Stony Creek.

(e) Lower Tributaries Segments — the surface waters of the catchments of the tributaries of the Latrobe River between the Yallourn Storage Dam and Sale Swing Bridge, not including those in the Potable Water Supply Segments, those in the Coal Area Tributaries Segment and those in the Lower Thomson Segment.

(f) Lower Thomson Segment — the surface waters of the catchment of the Thomson River upstream of the emergency water supply offtake for Sale, not including those in the Potable Water Supply Segment.

(g) Latrobe Tidal Segment — the surface waters of the Latrobe River catchment from the Sale Swing Bridge to Lake Wellington.

(h) Groundwater Segment — those waters contained within all groundwater aquifers beneath the Policy area.

Part III — Beneficial Uses to be Protected

7. The following beneficial uses shall be protected with respect to the water quality of the Potable Water Supply Segment:

(a) Potable water supply
— with disinfection

(b) Agricultural water supply
— stock water
— irrigation

(c) Industrial water supply

(d) Maintenance and preservation of aquatic ecosystems and associated wildlife (level III protection)

(e) Maintenance and preservation of riparian vegetation
(f) Production of edible fish and other aquatic life
(g) Recreation
— primary contact (e.g. bathing)
— secondary contact (e.g. wading, boating)
— passive (e.g. aesthetic enjoyment)
(h) Recharging of aquifers
(i) Flushing of downstream section of river.

8. The following beneficial uses shall be protected with respect to the water quality of Upper Latrobe Segment:
(a) Potable water supply
— with treatment
(b) Agricultural water supply
— stock water
— irrigation
(c) Industrial water supply
(d) Maintenance and preservation of aquatic ecosystems and associated wildlife (level IV protection)
(e) Maintenance and preservation of riparian vegetation
(f) Production of edible fish and other aquatic life
(g) Recreation
— primary contact (e.g. bathing)
— secondary contact (e.g. wading, boating)
— passive (e.g. aesthetic enjoyment)
(h) Recharging of aquifers
(i) Flushing of downstream section of river.

9. The following beneficial uses shall be protected with respect to water quality of the Lower Latrobe River Segment:
(a) Agricultural water supply
— stock water
— irrigation
(b) Industrial water supply
(c) Maintenance of modified ecosystems (downstream of Traralgon Creek)
(d) Passage of fish (upstream of Traralgon Creek)
(e) Maintenance and preservation of riparian vegetation
(f) Production of edible fish and crustacea (downstream of Traralgon Creek)
(g) Recreation
— primary contact (e.g. bathing)
— secondary contact (e.g. wading, boating)
— passive (e.g. aesthetic enjoyment)
(h) Recharging of aquifers
(i) Flushing of downstream section of river.

10. The following beneficial uses shall be protected with respect to water quality of Coal Area Tributaries Segment:
(a) Agricultural water supply
— stockwater
— irrigation (with special management)
(b) Industrial water supply
(c) Maintenance of modified ecosystems (except Morwell River and Traralgon Creek)
(d) Passage of Fish (Morwell River and Traralgon Creek)
(e) Maintenance and preservation of riparian vegetation
(f) Production of edible fish and other aquatic life (except Morwell River)
(g) Recreation
— secondary contact (e.g. wading)
— passive (e.g. aesthetic enjoyment)
(h) Recharging of aquifers
(i) Flushing of downstream section of river.

11. The following beneficial uses shall be protected with respect to water quality of Lower Tributaries Segment:
(a) Potable water supply
— with treatment (O'Grady's Creek upstream of Boolarra water supply offtake, Morwell River upstream of Mirboo North water supply offtake).
(b) Agricultural water supply
— stock water
— irrigation
(c) Industrial water supply
(d) Maintenance and preservation of aquatic ecosystems and associated wildlife (level IV protection)
(e) Maintenance and preservation of riparian vegetation
(f) Production of edible fish and other aquatic life
(g) Recreation
— secondary contact (e.g. wading, boating)
— passive (e.g. aesthetic enjoyment)
(h) Recharging of aquifers
(i) Flushing of downstream section of river.

12. The following beneficial uses shall be protected with respect to water quality of the Lower Thomson Segment:

(a) Potable water supply
— with treatment

(b) Agricultural water supply
— stock water
— irrigation

(c) Industrial water supply

(d) Maintenance and preservation of aquatic ecosystems and associated wildlife (level IV protection)

(e) Maintenance and preservation of riparian vegetation

(f) Production of edible fish and other aquatic life

(g) Recreation
— primary contact (e.g. bathing)
— secondary contact (e.g. wading, boating)
— passive (e.g. aesthetic enjoyment)

(h) Recharging of aquifers

(i) Flushing of downstream section of river.

13. The following beneficial uses shall be protected with respect to water quality of the Latrobe Tidal Segment:

(a) Agricultural water supply
— stock water

(b) Maintenance and preservation of aquatic ecosystems and associated wildlife (level IV protection)

(c) Maintenance and preservation of riparian vegetation

(d) Production of edible fish and other aquatic life

(e) Recreation
— primary contact (e.g. bathing)
— secondary contact (e.g. wading, boating)
— passive (e.g. aesthetic enjoyment)

(f) Flushing of Gippsland Lakes.

14. The following beneficial uses shall be protected with respect to water quality of the Groundwater Segment.

(a) Potable water supply
— with treatment

(b) Agricultural water supply
— stock water
— irrigation

(c) Industrial water supply

(d) Replenishment of surface waters.

Part IV — Water Quality Indicators and Objectives

15. The level of water quality required to protect the identified beneficial uses in each segment and downstream waters is defined by the water quality indicators and objectives specified in clause 16.

16. The water quality indicators and objectives for each of the segments referred to in this Policy shall be those prescribed in the respective schedules as follows:

Segment	*Schedule*
Potable Water Supply Segments	A
Upper Latrobe Segment	B
Lower Latrobe River Segment	C
Coal Area Tributaries Segment	D
Lower Tributaries Segment	E
Lower Thomson Segment	B
Latrobe Tidal Segment	F
Groundwater Segment	G

17. The water quality indicators and objectives specified in clause 16 shall apply to all waters in each segment respectively, except where provisions are made to the contrary in a licence by the designation of mixing zones.

18. The volume, constituency and location of all waste discharges to the surface waters and groundwaters shall be consistent with the attainment and maintenance of water quality objectives for those waters.

Part V — Attainment Programme

General

19. *Implementation.* The objectives of this Policy shall be attained and maintained by the following means:

(a) control of the discharge of wastes to the surface waters through the licensing provisions of the Act and, where applicable, through Regulations introduced under the Act;

(b) adequate sewerage and drainage services;

(c) appropriate location and management of waste disposal and waste generating activities;

(d) management of flows, storages and diversions of surface waters and groundwaters to ensure an adequate minimum flow, having regard to the beneficial uses; and

(e) educational, research, monitoring and investigation activities in so far as these are necessary to carry out the above.

20. *Implementation plans.* The Authority shall co-ordinate the development of implementation plans, based on the provisions of the Act and the Policy, for the attainment and maintenance of Policy objectives. Such plans may make provision for a staged attainment of Policy objectives.

21. *Planning Policy.* This Policy shall be implemented in conjunction with the relevant Statements of Planning Policy made under the Town and Country Planning Act 1961.

22. *Review.* The Policy shall be subject to review and amendment as new information and circumstances warrant.

Detailed Provisions

Waste Discharge Licensing

23. *Relationship to Policy objectives.* Subject to the provisions of this Policy, in considering applications for a licence the Authority or delegated agency shall have regard to the effect of the discharge, together with the collective effect of other waste discharges on the beneficial uses to be protected under this Policy, so that the licence, if granted, and the conditions to which it is subject shall be consistent with the attainment and maintenance of the Policy objectives.

24. *Future waste discharge.* In considering applications for a licence the Authority or delegated agency shall have regard to the need to preserve capacity of the surface waters to receive future waste discharges.

25. *Mixing zones.* In granting a licence the Authority or delegated agency may provide for the mixing of wastes with the receiving waters by designating a mixing zone within which Policy objectives for the indicator or indicators specified in the licence are not required to be achieved. Mixing zones may not be designated for the indicators floatable matter, odour, and settleable matter.

The designation of a mixing zone is subject to the following requirements:

(i) there must be no significant detriment to protected beneficial uses as a result of the mixing zone;

(ii) the mixing zone must be as small as practicable;

(iii) the licence must specify clearly the location and size of the mixing zone and the indicator or indicators to which it applies.

26. *Exemptions.* Exemptions to waste discharge licensing made under Section 20 (11) of the Act do not obviate the need for these waste discharges to comply with the objectives and provisions made in the Policy.

27. *Rules for licensing.* For the purpose of Section 17 (1) of the Act, the surface waters included in this Policy are hereby set aside as an area of the environment in which the discharge, emission or deposit of wastes is prohibited or restricted as hereafter specified:

(i) Licences issued after the declaration of this Policy shall not permit the net licensed nutrient load to increase by more than the following:

35 kg/day total phosphorus (mean daily load)
300 kg/day total nitrogen (mean daily load)

The net licensed nutrient load is the total licensed nutrient load less the load contributed from surface water supplies.

These loads shall be subject to review when the results of the Gippsland Region Environmental Study become available.

(ii) No licences shall be granted for new discharges of wastes to the surface waters of the Potable Water Supply Segments with the exception of domestic waste water effluents from existing settlements, which may be granted a combined land/water discharge licence provided other conditions appropriate to the locality can be met.

(iii) Where a licence is issued for the discharge of wastes to the Coal Area Tributaries Segment, the level of filterable residue shall not exceed 1000 mg/l except for the Hazelwood Cooling Pond discharge which may be permitted to exceed this level until 1st January 1985.

28. *Groundwater.* For the purposes of Section 17 (1) of the Act, groundwater contained within the Groundwater Segment of this Policy is hereby set aside as an element of the environment in which the discharge, emission, or deposit of wastes is prohibited or restricted as hereby specified:

No licences shall be issued for the direct injection of wastes into the Groundwater Segment by means of a bore, well, infiltration basin or the like, except for the purpose of:

(i) artificially recharging an aquifer to control salt water intrusion, without deterioration of water quality;

(ii) improving the quality of the groundwater;

(iii) increasing the yield of an aquifer, without deterioration of water quality; or

(iv) preventing land subsidence, without deterioration of water quality.

29. *Heavy metals.* Where a licence is issued for the discharge of wastes to the Policy area from the industries specified in Schedule H, the concentration of heavy metals in such discharges shall not exceed the limits given in Schedule H.

30. *Thermal discharge — Yallourn.* In respect to the thermal discharge associated with Yallourn CDE and W power stations the background level for temperature shall be measured upstream of the influence of this discharge and downstream of the Yallourn Storage. The temperature objective in the case of this discharge shall be applied at the Brown Coal Mine Bridge.

Servicing

31. *Sewerage.*

(a) Responsible authorities shall ensure that no further land is subdivided into allotments where domestic wastewaters cannot be adequately treated and retained within the boundaries of each allotment, unless sewerage is to be provided before the commencement of building works, except where the total number of allotments so created by one or more subdivisions from a single parcel of land existing under one title at the date of gazettal of this Policy is less than ten allotments.

(b) Sewerage shall be provided as soon as possible to all existing subdivisions of land where domestic wastewaters cannot be adequately treated and retained within the boundaries of each allotment. Where practicable, sewerage shall be provided prior to the commencement of building works. High priority should be given to sewering existing subdivisions where building works have already commenced.

(c) In determining whether domestic wastewaters are capable of being adequately treated and retained within the boundaries of each allotment, responsible authorities shall have regard to factors such as the dimensions and area of the allotments, the intensity of the proposed use, climatic and soil conditions, water supply conditions and physical characteristics of the site.

(d) In sewered areas, appropriate steps shall be taken by sewerage authorities to ensure that all premises are connected to the sewerage system.

(e) Detailed consideration and encouragement shall be given to the reclamation and re-use of wastewater and in particular, to the discharge of sewage effluent to land.

32. *Discharge to sewer.* The discharge of waste from any sewered property or any property where sewerage reticulation is available should be to the sewerage system, if that waste (with pretreatment if necessary) is acceptable to the appropriate sewerage authority.

33. *Drainage.* Drainage system design shall ensure that erosion of streambeds, streambanks and other drainage lines does not result from the provision of such services and should make allowance, where practical, for the attenuation of peak runoff and the retention and trapping of contaminants in runoff. Inputs of these contaminants to the drainage system should be minimised.

Waste Generation and Waste Disposal

34. *Land disturbance and erosion.* Land disturbance activities shall be carefully controlled and appropriate soil conservation measures shall be encouraged in order to minimise soil erosion and subsequent runoff of suspended, dissolved and settleable matter.

(a) Construction works should be carried out in accordance with *Guidelines for minimising soil erosion and sedimentation from construction sites in Victoria (1979)* published by the Soil Conservation Authority.

(b) Streambank stabilisation techniques, including the establishment of vegetated buffer zones, should be applied where necessary to prevent streambank erosion. Livestock access to buffer zones should be carefully controlled so as not to conflict with the purpose of such zones.

(c) Stream management or extractive works should not be carried out in such a manner as to adversely affect the beneficial uses protected by this Policy.

(d) Land disturbance in the vicinity of surface waters should be minimised during forest operations and in particular:

(i) Reserves should be recognised along permanent streams in which forest utilization operations are restricted.

(ii) The location, design and drainage of forest roads and tracks should be such that their impact on water quality is minimised.

(iii) Intensive forest utilization operations should be avoided in areas of high erosion hazard, including steep slopes.

35. *Disposal of wastes to land (including solid wastes and sludge).* The disposal of wastes to the land surface shall be carried out in such a manner and at such locations as to prevent the pollution of groundwater and surface waters.

36. *Dredging, spoil disposal and other works.* Dredging, reclamation, building of wharves and other works should be carried out in a manner which causes minimal disturbance of plant and animal habitats. Where practical, the disposal of dredged spoil shall be on land.

37. *Contingency plans.* Industries in the Policy area should be encouraged to develop and maintain contingency plans for the prevention and control of breakdowns and spillages. Such plans should include:

(a) emergency holding and clean-up procedures;

(b) actions to minimise the adverse effects; and

(c) methods for disposal of spilled materials.

38. *Agricultural wastes.* The location and operation of milking sheds, piggeries, poultry farms and cattle feedlots should be in accordance with *Guidelines for the Conduct of Intensive Animal Industries* published by the Department of Agriculture and the Authority. In particular:

(a) No piggery, poultry farm or feedlot should be established within the Potable Water Supply Segments.

(b) No building or yard associated with any intensive animal industry should be constructed within 800 metres upstream of any water supply storage or off-take controlled by a statutory authority or within 100 metres of any watercourse.

39. *Rules for agricultural waste disposal.* For the purpose of Section 17(1) of the Act, rules prohibiting and restricting the discharge of waste to the Policy area from farms are hereby made as follows:

(a) All effluents from milking sheds, piggeries, poultry farms and feedlots shall be disposed of by land irrigation in such a manner as to preclude any polluted runoff to surface waters.

(b) No solid or liquid effluent from any intensive animal industry shall be disposed of within 800 metres upstream of any water supply storage or off-take controlled by a statutory authority or within 100 metres of any surface waters.

(c) All farm effluents from vegetable washing and processing shall be disposed of by land irrigation in such a manner as to preclude any polluted runoff to surface waters.

Flow

40. *Latrobe River.*

(a) Prior to the commencement of operation of the Tanjil (Blue Rock) Dam, the minimum flow of the Latrobe River at the Brown Coal Mine Bridge shall be 250 megalitres per day or 50 per cent of the natural flow (which ever is the lesser).

(b) After the commencement of operation of the Tanjil (Blue Rock) Dam, the minimum flow of the Latrobe River downstream of its existing junction with the Morwell River shall be 350 megalitres per day, or 125 per cent of the natural flow (which ever is the lesser).

41. *Thomson River and Macalister River.* The Policy shall be amended to include minimum flows for the Thomson River and the Macalister River when sufficient information is available.

42. *Seasonal patterns.* Diversion and storages on all streams in the Policy area should be managed to ensure maintenance of natural seasonal variation in flow pattern.

Related Activities

43. *Monitoring.* The Authority shall undertake a water quality monitoring programme to ensure that sufficient data are available to assist in the implementation of this Policy and to assess the attainment and maintenance of Policy objectives. The reports of such monitoring will be published.

44. *Public education.* In co-operation with other public and private bodies, the Authority shall promote public education in water quality management, waste disposal and pollution control.

SCHEDULE A

WATER QUALITY INDICATORS AND OBJECTIVES
FOR THE POTABLE WATER SUPPLY SEGMENTS

Indicator	*Objective*
1. Dissolved Oxygen	The concentration of dissolved oxygen shall not be less than 7.5 mg/l or 75% saturation (whichever is the higher).
2. Bacteria Total coliforms	The level of total coliform organisms shall not exceed 100/100 ml in more than 5% of the total number of samples taken in one year.
E.coli	The level of *E.coli* organisms shall not exceed 10/100 ml in more than 5% of the total number of samples taken in one year.
3. pH	The pH shall not vary from background level by more than ± 0.5 units, nor fall outside the range of 6.0 to 8.5.
4. Temperature	The temperature shall not vary by more than 2°C from background levels.
5. Filterable Residue (Total Dissolved Solids)	The level of filterable residue shall not vary by more than 10 per cent from background levels.
6. Light Penetration	The combined effects of turbidity and colour shall not reduce light transmission by more than 10 per cent of the background level as measured over a standard pathlength.

SCHEDULE A *CONTINUED*

Indicator	*Objective*
7. Toxicants	(a) The level of toxicants shall not exceed levels for which there is substantiated evidence of lethal or sublethal toxic effects or undesirable physiological responses in humans, plants, birds, animals, fish or other aquatic life, as these relate to the stated beneficial uses of this segment, with due regard to biologically cumulative effects in food chains and the combined effects of toxicant mixtures. (b) Without limiting the generality of objective (a), the level of toxicants shall not exceed that derived from sub-clauses (i) and (ii), below, Table 4 or Table 5 (whichever is the lowest). (i) *Single Toxicants* The concentration of individual toxicants shall not exceed the concentration given by the formula: $N + 0.5 (T - N)$ where T is the threshold concentration of chronic sublethal effects for aquatic ecosystems, and N is the natural background level of the toxicant. The threshold concentration (T) for each toxicant may be derived from multigeneration or chronic toxicity tests designed to determine the effects of the toxicant on the physiology, behaviour and reproduction of a sensitive local species approved by the Authority. The results of these may be confirmed by biological studies on the survival and productivity of sensitive species in the environment. In the absence of data from multigeneration or chronic toxicity tests the threshold concentration (T) may be derived from acute toxicity tests on a sensitive local species approved by the Authority. In particular T may be estimated by multiplying the 96 hour LC50 value for sensitive species approved by the Authority by an appropriate application factor specified by the Authority. In the absence of toxicity data on suitable local species the toxicant concentrations, other than pesticide concentrations, given in Table 1 may be used as an estimate of T. These shall be known as Interim T Estimates (ITE). The Interim T Estimates for pesticides given in Table 1 multiplied by 0.5 shall be used as guidelines to indicate levels which, if exceeded, would cause further investigation to be made followed by appropriate action including possible amendment of the Policy to provide specific limits if warranted. (ii) *Toxicant Mixtures* The levels of toxic materials in combination shall satisfy the following relationship: $\frac{C1}{L1} + \frac{C2}{L2} + \ldots + \frac{Cn}{Ln} \leq 1.0$ Where C1, C2, Cn are the measured or expected concentrations of the toxicants and L1, L2, Ln are the appropriate levels derived from (b) (i) for toxicants in isolation. Individual fractions less than 0.2 are not included in the summation.
8. Nutrients and Biostimulants	Nutrients and other growth stimulants shall not be present in quantities sufficient to cause excessive or nuisance growths of algae or other aquatic plants, or changes in species composition of phytoplankton and other aquatic plants in waters of this segment or downstream waters (including the Gippsland Lakes).
9. Aesthetic Characteristics Odours, taints and colours	(a) Substances which may produce objectionable odours, taints or colours in waters or edible aquatic organisms shall not be present at concentrations detectable by organoleptic tests. (The objective for odours and colours in waters shall also apply to mixing zones.) (b) Without limiting the generality of objective (a): The concentrations of individual substances listed in Table 2 shall not exceed the limits given in the Table. The levels of potability indicators listed in Table 3 shall not exceed the limits given in the Table.
Floatable Matter	There shall be no visible floating oil, grease, scum, litter or other objectionable matter. (This objective shall also apply to mixing zones.)
10. Settleable Matter	The level of settleable matter shall not exceed background levels.

SCHEDULE B

WATER QUALITY INDICATORS AND OBJECTIVES FOR UPPER LATROBE SEGMENT AND LOWER THOMSON SEGMENT

Indicator	*Objective*
1. Dissolved Oxygen	The concentration of dissolved oxygen shall not be less than 6 mg/l or 60% of saturation (whichever is the higher).
2. Bacteria *E.coli*	The level of *E.coli* organisms shall not exceed 100/100 ml in more than 10% of the total number of samples taken in one year.
3. pH	The pH shall not vary from background levels by more than ± 0.5 units nor fall outside the range of 6.0 to 8.5.
4. Temperature	The temperature shall not vary by more than 2°C from background levels.
5. Filterable Residue (Total Dissolved Solids)	The level of filterable residue shall not vary by more than 10 per cent from background levels.
6. Light Penetration	The combined effects of turbidity and colour shall not reduce light transmission by more than 10 per cent of the background level as measured over a standard pathlength.
7. Toxicants	(a) The level of toxicants shall not exceed levels for which there is substantiated evidence of lethal or sublethal toxic effects or undesirable physiological responses in humans, plants, birds, animals, fish or other aquatic life, as these relate to the stated beneficial uses of this segment, with due regard to biologically cumulative effects in food chains and the combined effects of toxicant mixtures. (b) Without limiting the generality of objective (a), the level of toxicants shall not exceed that derived from sub-clauses (i) and (ii), below, Table 4 or Table 5 (whichever is the lowest). (i) *Single Toxicants* The concentration of individual toxicants shall not exceed the threshold concentration of chronic sublethal effects for aquatic ecosystems. The threshold concentration (T) for each toxicant may be derived from multigeneration or chronic toxicity tests designed to determine the effects of the toxicant on the physiology, behaviour and reproduction of a sensitive local species approved by the Authority. The results of these may be confirmed by biological studies on the survival and productivity of sensitive species in the environment. In the absence of data from multigeneration or chronic toxicity tests the threshold concentration (T) may be derived from acute toxicity tests on a sensitive local species approved by the Authority. In particular T may be estimated by multiplying the 96 hour LC50 value for sensitive species approved by the Authority by an appropriate application factor specified by the Authority. In the absence of toxicity data on suitable local species the toxicant concentrations, other than pesticide concentrations, given in Table 1 may be used as an estimate of T. These shall be known as Interim T Estimates (ITE). The Interim T Estimates for pesticides given in Table 1 shall be used as guidelines to indicate levels which, if exceeded would cause further investigations to be made followed by appropriate action including possible amendment of the Policy to provide specific limits if warranted. (ii) *Toxicant Mixtures* The levels of toxic materials in combination shall satisfy the following relationship: $\frac{C1}{L1} + \frac{C2}{L2} + \ldots + \frac{Cn}{Ln} \leq 1.0$ Where C1, C2, Cn are the measured or expected concentrations of the toxicants and L1, L2, Ln are the appropriate levels derived from (b) (i) for toxicants in isolation. Individual fractions less than 0.2 are not included in the summation.
8. Nutrients and Biostimulants	Nutrients and other growth stimulants shall not be present in quantities sufficient to cause excessive or nuisance growths of algae or other aquatic plants, or changes in species composition of phytoplankton and other aquatic plants in waters of this segment or downstream waters (including the Gippsland Lakes).
9. Aesthetic Characteristics Odours, taints and colours	(a) Substances which may produce objectionable odours, taints or colours in waters or edible aquatic organisms shall not be present at concentrations detectable by organoleptic tests. (The objective for odours and colours in waters shall also apply to mixing zones.) (b) Without limiting the generality of objective (a): The concentrations of individual substances listed in Table 2 shall not exceed the limits given in the Table.
Floatable Matter	There shall be no visible floating oil, grease, scum, litter or other objectionable matter. (This objective shall also apply to mixing zones.)
10. Settleable Matter	The level of settleable matter shall not result in bottom deposits which would be detrimental to any protected beneficial use. (This objective shall also apply to mixing zones.)

SCHEDULE C

WATER QUALITY INDICATORS AND OBJECTIVES
FOR THE LOWER LATROBE RIVER SEGMENT

Indicator	*Objective*
1. Dissolved Oxygen	The concentration of dissolved oxygen shall not be less than 4.5 mg/l or 45% of saturation (whichever is the higher).
2. Bacteria *E.coli*	The geometric mean of *E.coli* organisms in the waters of these segments shall not exceed 200/100 ml based on not less than 5 samples taken within a 42-day period, nor shall more than 20 per cent of these samples exceed 400 organisms per 100 ml.
3. pH	The pH shall not vary from background levels by more than ± 0.5 units, nor fall outside the range of 6.0 to 8.5.
4. Temperature (i) Latrobe River Upstream of Traralgon Creek	The temperature shall be consistent with the objective for water downstream of Traralgon Creek and shall not exceed 26 °C nor vary from background levels by more than the following: 4 °C December to March (inclusive) 4.5 °C April and November 5.5 °C May and October 6.5 °C June to September (inclusive) Changes in temperature shall not exceed 2 °C in any 30 minute period.
(ii) Latrobe River Downstream of Traralgon Creek	The temperature shall not vary from background level by more than 4 °C. Changes in temperature shall not exceed 2 °C in any 30 minute period.
5. Filterable Residue (Total Dissolved Solids)	The level of filterable residue shall not exceed 450 mg/l at Rosedale Bridge, nor shall such level exceed 350 mg/l immediately upstream of the influence of the licensed discharge point of Australian Paper Manufacturers Limited at Maryvale.
6. Light Penetration	The combined effect of turbidity and colour shall not reduce light transmission by more than 10 per cent of the background level as measured over a standard pathlength.
7. Toxicants	(a) The level of toxicants shall not exceed levels for which there is substantiated evidence of lethal or sublethal toxic effects or undesirable physiological responses in humans, plants, birds, animals, fish or other aquatic life, as these relate to the stated beneficial uses of this segment, with due regard to biologically cumulative effects in food chains and the combined effects of toxicant mixtures. (b) Without limiting the generality of objective (a), the level of toxicants shall not exceed that derived from sub-clauses (i) and (ii) below, or Table 5 (whichever is the lowest). (i) *Single Toxicants* The concentration of individual toxicants shall not exceed two times the threshold concentration of chronic sublethal effects for aquatic ecosystems. The threshold concentration (T) for each toxicant may be derived from multigeneration or chronic toxicity tests designed to determine the effects of the toxicant on the physiology, behaviour and reproduction of a local species approved by the Authority. The results of these may be confirmed by biological studies on the survival and productivity of these species in the environment. In the absence of data from multigeneration or chronic toxicity tests the threshold concentration (T) may be derived from acute toxicity tests on a local species approved by the Authority. In particular T may be estimated by multiplying the 96 hour LC50 value for the species approved by the Authority by an appropriate application factor specified by the Authority. In the absence of toxicity data on suitable local species the toxicant concentrations, other than pesticide concentrations, given in Table 1 may be used as an estimate of T. These shall be known as Interim T Estimates (ITE). The Interim T Estimates for pesticides, given in Table 1, multiplied by 2, shall be used as guidelines to indicate levels which, if exceeded would cause further investigation to be made followed by appropriate action including possible amendment of the Policy to provide specific limits if warranted. (ii) *Toxicant Mixtures* The levels of toxic materials in combination shall satisfy the following relationship: $\frac{C1}{L1} + \frac{C2}{L2} + \ldots + \frac{Cn}{Ln} \leq 2.0$ Where C1, C2, Cn are the measured or expected concentrations of the toxicants and L1, L2, Ln are the appropriate levels derived from (b) (i) for toxicants in isolation. Individual fractions less than 0.2 are not included in the summation.
8. Nutrients and Biostimulants	Nutrients and other growth stimulants should not be present in sufficient quantities to cause excessive or nuisance growths of algae or other aquatic plants in waters of this segment or downstream waters (including the Gippsland Lakes).
9. Aesthetic Characteristics Odours, taints and colours	(a) Substances which may produce objectionable odours, taints or colours in waters or edible aquatic organisms shall not be present at concentrations detectable by organoleptic tests. (The objective for odours and colours in waters shall also apply to mixing zones.)

SCHEDULE C *CONTINUED*

Indicator	*Objective*
	(b) Without limiting the generality of objective (a), the concentration of individual substances listed in Table 2 shall not exceed the levels given in the Table.
Floatable Matter	There shall be no visible floating oil, grease, scum, litter or other objectionable matter. (This objective shall also apply to mixing zones.)
10. Settleable Matter	The level of settleable matter shall not result in bottom deposits which would be detrimental to any protected beneficial use. (This objective shall also apply to mixing zones.)

SCHEDULE D

WATER QUALITY INDICATORS AND OBJECTIVES
FOR THE COAL AREA TRIBUTARIES SEGMENTS

Indicator	*Objective*
1. Dissolved Oxygen	The concentration of dissolved oxygen shall not be less than 4.5 mg/l or 45% of saturation (whichever is the higher).
2. Bacteria *E.coli*	The geometric mean of *E.coli* organisms in the waters of these segments shall not exceed 1000/100 ml based on not less than 5 samples taken within a 42-day period, nor shall more than 20 per cent of these samples exceed 2000 organisms per 100 ml.
3. pH	The pH shall not vary from background level by more than ± 0.5 units, nor fall outside the range of 6.0 to 8.5.
4. Temperature	
(i) Streams other than Morwell River and Traralgon Creek	The temperature shall not vary by more than 4 °C from the background levels. Changes in temperature shall not exceed 2 °C in any 30 minute period.
(ii) Morwell River	After the Loy Yang A power station has been completed the temperature shall not vary from background levels by more than the following: 10 °C April to November (inclusive) 5 °C December to March (inclusive) Changes in temperature shall not exceed 2 °C in any 30 minute period.
(iii) Traralgon Creek	The temperature shall not vary from background by more than the following: 6 °C April to November (inclusive) 4 °C December to March (inclusive) (measured as monthly averages) Changes in temperature shall not exceed 2 °C in any 30 minute period.
5. Filterable Residue (Total Dissolved Solids)	
(i) Streams other than Traralgon Creek and Morwell River	The level of filterable residue shall not exceed 1000 mg/l and shall be consistent with the level in the Latrobe River at Rosedale Bridge not exceeding 450 mg/l. The annual average level of filterable residue shall not exceed 500 mg/l. The Sodium Adsorption Ratio shall not exceed 7.5.
(ii) Traralgon Creek	The level of filterable residue shall not exceed 1000 mg/l and shall be consistent with the level in the Latrobe River at Rosedale Bridge not exceeding 450 mg/l. The annual average level of filterable residue shall not exceed 500 mg/l after the commissioning of the 4000 MW power station at Loy Yang. The Sodium Adsorption Ratio shall not exceed 7.5.
(iii) Morwell River	Prior to 1 January 1985 the level of filterable residue shall not exceed 1050 mg/l and thereafter the level of filterable residue shall not exceed 1000 mg/l and shall be consistent with the level in the Latrobe River at Rosedale Bridge not exceeding 450 mg/l.
6. Light Penetration	The combined effect of turbidity and colour shall not reduce light transmission by more than 10 per cent of the background level as measured over a standard pathlength.
7. Toxicants	(a) The level of toxicants shall not exceed levels for which there is substantiated evidence of lethal or sublethal toxic effects or undesirable physiological responses in humans, plants, birds, animals, fish or other aquatic life, as these relate to the stated beneficial uses of this segment, with due regard to biologically cumulative effects in food chains and the combined effects of toxicant mixtures. (b) Without limiting the generality of objective (a), the level of toxicants shall not exceed that derived from sub-clauses (i) and (ii) below, or Table 5 (whichever is the lowest). (i) *Single Toxicants* The concentration of individual toxicants shall not exceed two times the threshold concentration of chronic sublethal effects for aquatic ecosystems. The threshold concentration (T) for each toxicant may be derived from multigeneration or chronic toxicity tests designed to determine the effects of the toxicant on the physiology, behaviour and reproduction of a local species approved by the Authority. The results of these may be confirmed by biological studies on the survival and productivity of these species in the environment.

SCHEDULE D *CONTINUED*

Indicator	*Objective*
	In the absence of data from multigeneration or chronic toxicity tests the threshold concentration (T) may be derived from acute toxicity tests on a local species approved by the Authority. In particular T may be estimated by multiplying the 96 hour LC50 value for the species approved by the Authority by an appropriate application factor specified by the Authority. In the absence of toxicity data on suitable local species the toxicant concentrations, other than pesticide concentrations, given in Table 1 may be used as an estimate of T. These shall be known as Interim T Estimates (ITE). The Interim T Estimates for pesticides given in Table 1, multiplied by 2, shall be used as guidelines to indicate levels which, if exceeded would cause further investigation to be made followed by appropriate action including possible amendment of the Policy to provide specific limits if warranted. (ii) *Toxicant Mixtures* The levels of toxic materials in combination shall satisfy the following relationship: $\frac{C1}{L1} + \frac{C2}{L2} + \ldots + \frac{Cn}{Ln} \leq 2.0$ Where CI, C2, Cn are the measured or expected concentrations of the toxicants and L1, L2, Ln are the appropriate levels derived from (b) (i) for toxicants in isolation. Individual fractions less than 0.2 are not included in the summation.
8. Nutrients and Biostimulants	Nutrients and other growth stimulants should not be present in sufficient quantities to cause excessive or nuisance growths of algae or other aquatic plants in waters of this segment or downstream waters (including the Gippsland Lakes).
9. Aesthetic Characteristics Odours, taints and colours	(a) Substances which may produce objectionable odours, taints or colours in waters or edible aquatic organisms shall not be present at concentrations detectable by organoleptic tests. (The objective for odours and colours in water shall also apply to mixing zones.) (b) Without limiting the generality of objective (a), the concentrations of individual substances listed in Table 2 shall not exceed the levels given in the Table.
Floatable Matter	There shall be no visible floating oil, grease, scum, litter or other objectionable matter (this objective shall also apply to mixing zones).
10. Settleable Matter	The level of settleable matter shall not result in bottom deposits which would be detrimental to any protected beneficial use. (This objective shall also apply to mixing zones.)

SCHEDULE E

WATER QUALITY INDICATORS AND OBJECTIVES FOR THE LOWER TRIBUTARIES SEGMENTS

Indicator	*Objective*
1. Dissolved Oxygen	The concentration of dissolved oxygen shall not be less than 6 mg/l or 60% of saturation (whichever is the higher).
2. Bacteria	
Waters upstream of the Boolarra water supply offtake and the Mirboo North water supply offtake.	
E.coli	The level of *E.coli* organisms shall not exceed 100/100 ml in more than 10% of samples taken in one year.
All other waters. *E.coli*	The geometric mean of *E.coli* organisms in the waters of these segments shall not exceed 1000/100 ml based on not less than 5 samples taken within a 42-day period, nor shall more than 20 per cent of these samples exceed 2000 organisms per 100 ml.
3. pH	The pH shall not vary from background levels by more than ± 0.5 units, nor fall outside the range of 6.0 to 8.5.
4. Temperature	The temperature shall not vary by more than 2°C from background levels.
5. Filterable Residue (Total Dissolved Solids)	The level of filterable residue shall not exceed 500 mg/l.
6. Light Penetration	The combined effect of turbidity and colour shall not reduce light transmission by more than 10 per cent of the background level as measured over a standard pathlength.
7. Toxicants	(a) The level of toxicants shall not exceed levels for which there is substantiated evidence of lethal or sublethal toxic effects or undesirable physiological responses in humans, plants, birds, animals, fish or other aquatic life, as these relate to the stated beneficial uses of this segment, with due regard to biologically cumulative effects in food chains and the combined effects of toxicant mixtures. (b) Without limiting the generality of objective (a), the level of toxicants shall not exceed that derived from sub-clauses (i) and (ii) below, or Table 5 (whichever is the lowest).

SCHEDULE E *CONTINUED*

Indicator	*Objective*
	(i) *Single Toxicants* The concentration of individual toxicants shall not exceed the threshold concentration of chronic sublethal effects for aquatic ecosystems. The threshold concentration (T) for each toxicant may be derived from multigeneration or chronic toxicity tests designed to determine the effects of the toxicant on the physiology, behaviour and reproduction of a sensitive local species approved by the Authority. The results of these may be confirmed by biological studies on the survival and productivity of sensitive species in the environment. In the absence of data from multigeneration or chronic toxicity tests the threshold concentration (T) may be derived from acute toxicity tests on a sensitive local species approved by the Authority. In particular T may be estimated by multiplying the 96 hour LC50 value for sensitive species approved by the Authority by an appropriate application factor specified by the Authority. In the absence of toxicity data on suitable local species the toxicant concentrations, other than pesticide concentrations, given in Table 1 may be used as an estimate of T. These shall be known as Interim T Estimates (ITE). The Interim T Estimates for pesticides given in Table 1 shall be used as guidelines to indicate levels which, if exceeded would cause further investigations to be made followed by appropriate action including possible amendment of the Policy to provide specific limits if warranted. (ii) *Toxicant Mixtures* The levels of toxic materials in combination shall satisfy the following relationship: $\frac{C1}{L1} + \frac{C2}{L2} + \ldots + \frac{Cn}{Ln} \leqslant 1.0$ Where C1, C2, Cn are the measured or expected concentrations of the toxicants and L1, L2, Ln are the appropriate levels derived from (b) (i) for toxicants in isolation. Individual fractions less than 0.2 are not included in the summation.
8. Nutrients and Biostimulants	Nutrients and other growth stimulants shall not be present in quantities sufficient to cause excessive or nuisance growths of algae or other aquatic plants, or changes in species composition of phytoplankton and other aquatic plants in waters of this segment or downstream waters (including the Gippsland Lakes).
9. Aesthetic Characteristics Odours, taints and colours	(a) Substances which may produce objectionable odours, taints or colours in waters or edible aquatic organisms shall not be present at concentrations detectable by organoleptic tests. (The objective for odours and colours in water shall also apply to mixing zones.) (b) Without limiting the generality of objective (a), the concentrations of individual substances listed in Table 2 shall not exceed the levels given in the Table.
Floatable Matter	There shall be no visible floating oil, grease, scum, litter or other objectionable matter (this objective shall also apply to mixing zones).
10. Settleable Matter	The level of settleable matter shall not result in bottom deposits which would be detrimental to any protected beneficial use. (This objective shall also apply to mixing zones.)

SCHEDULE F

WATER QUALITY INDICATORS AND OBJECTIVES
FOR THE LATROBE TIDAL SEGMENT

Indicator	*Objective*
1. Dissolved Oxygen	The concentration of dissolved oxygen shall not be less than 6 mg/l or 60% of saturation (whichever is the higher).
2. Bacteria *E.coli*	The geometric mean of *E.coli* organisms in waters of this segment shall not exceed 200 organisms per 100 ml, based on not less than 5 samples taken within a 42-day period, nor shall more than 20 per cent of these samples exceed 400 organisms per 100 ml.
3. pH	The pH shall not vary from background levels by more than ± 0.5 units, nor fall outside the range of 6.0 to 8.5.
4. Temperature	The temperature shall not vary by more than 2°C from background level.
5. Filterable Residue (Total Dissolved Solids)	The level of filterable residue shall not vary by more than 10% from prevailing levels established by monitoring after the declaration of this Policy.
6. Light Penetration	The combined effect of turbidity and colour shall not reduce light transmission by more than 10 per cent of the background levels as measured over a standard pathlength.

SCHEDULE F *CONTINUED*

Indicator	*Objective*
7. Toxicants	(a) The level of toxicants shall not exceed levels for which there is substantiated evidence of lethal or sublethal toxic effects or undesirable physiological responses in humans, plants, birds, animals, fish or other aquatic life, as these relate to the stated beneficial uses of this segment, with due regard to biologically cumulative effects in food chains and the combined effects of toxicant mixtures. (b) Without limiting the generality of objective (a), the level of toxicants shall not exceed that derived from sub-clauses (i) and (ii), below, or Table 5 (whichever is the lowest). (i) *Single Toxicants* The concentration of individual toxicants shall not exceed the threshold concentration of chronic sublethal effects for aquatic ecosystems. The threshold concentration T for each toxicant may be derived from multigeneration or chronic toxicity tests designed to determine the effects of the toxicant on the physiology, behaviour and reproduction of a sensitive local species approved by the Authority. The results of these may be confirmed by biological studies on the survival and productivity of sensitive species in the environment. In the absence of data from multigeneration or chronic toxicity tests the threshold concentration (T) may be derived from acute toxicity tests on a sensitive local species approved by the Authority. In particular T may be estimated by multiplying the 96 hour LC50 value for sensitive species approved by the Authority by an appropriate application factor specified by the Authority. In the absence of toxicity data on suitable local species the toxicant concentrations, other than pesticide concentrations, given in Table 1 may be used as an estimate of T. These shall be known as Interim T Estimates (ITE). The Interim T Estimates for pesticides given in Table 1 shall be used as guidelines to indicate levels which, if exceeded would cause further investigations to be made followed by appropriate action including possible amendment of the Policy to provide specific limits if warranted. (ii) *Toxicant Mixtures* The levels of toxic materials in combination shall satisfy the following relationship: $\frac{C1}{L1} + \frac{C2}{L2} + \ldots + \frac{Cn}{Ln} \leq 1.0$ Where C1, C2, Cn are the measured or expected concentrations of the toxicants and L1, L2, Ln are the appropriate levels derived from (b) (i) for toxicants in isolation. Individual fractions less than 0.2 are not included in the summation.
8. Nutrients and Biostimulants	Nutrients and other growth stimulants shall not be present in quantities sufficient to cause excessive or nuisance growths of algae or other aquatic plants, or changes in species composition of phytoplankton and other aquatic plants in waters of this segment or downstream waters (including the Gippsland Lakes).
9. Aesthetic Characteristics Odours, taints and colours	(a) Substances which may produce objectionable odours, taints or colours in waters or edible aquatic organisms shall not be present at concentrations detectable by organoleptic tests. (The objective for odours and colours in waters shall also apply to mixing zones.) (b) Without limiting the generality of objective (a), the concentrations of individual substances listed in Table 2 shall not exceed the levels given in the Table.
Floatable Matter	There shall be no visible floating oil, grease, scum, litter or other objectionable matter (this objective shall also apply to mixing zones).
10. Settleable Matter	The level of settleable matter shall not result in bottom deposits which would be detrimental to any protected beneficial use. (This objective shall also apply to mixing zones.)

SCHEDULE G

WATER QUALITY INDICATORS AND OBJECTIVES
FOR THE GROUNDWATER SEGMENT

Indicator	*Objective*
1. Dissolved Oxygen 2. Bacteria 3. pH 4. Temperature 5. Filterable Residue (Total Dissolved Solids) 6. Toxicants 7. Nutrients and Biostimulants 8. Aesthetic Characteristics Odours, taints and colours 9. Settleable Matter	There shall be no degradation in water quality for all indicators.

SCHEDULE H
HEAVY METAL LIMITS FOR THE QUALITY OF WASTE DISCHARGES FROM THE FOLLOWING INDUSTRIES:

1. Steel and alloy works
2. Battery manufacturing
3. Pigment and dye manufacturing
4. Electroplating works
5. Metal finishing works
6. Organic and petrochemical manufacturing
7. Plastic manufacturing
8. Fertilizer, pesticide, fungicide manufacturing

Heavy Metal	*Limit (g/m^3)*
Arsenic	0.50
Cadmium	0.10
Chromium (total)	0.30
Copper	0.20
Iron	2.0
Lead	0.10
Manganese	0.5
Mercury	0.005
Nickel	0.50
Silver	0.10
Zinc	0.50

TABLE 1
INTERIM T ESTIMATES (ITE) FOR FRESHWATERS

Toxicant	*ITE (µg/l)*
A. *Metals*	
Aluminium	(x)
Antimony	(x)
Arsenic	(x)
Barium	(x)
Beryllium	11
Bismuth	(x)
Cadmuim	0.4
Chromium	50.0
Cobalt	(x)
Copper	10.0
Iron	1000
Lead	30.0
Lithium	(x)
Manganese	(x)
Mercury	0.05
Molybdenum	(x)
Nickel	100
Silver	(x)
Thallium	(x)
Uranium	(x)
Vanadium	(x)
Zinc	30.0
Other Metals	(x)
B. *Pesticides*	
Acrolein	(x)
Aldrin	0.001
Allethrin	0.002
Aminocarb	(x)
Aminotriazole	300.0
Azinphosmethyl	0.001
Azinphosethyl	(x)
Benfluralin	(x)
Bensulide	(x)
Captafol	(x)
Carbaryl	0.02
Carbophenothion	(x)
Chlordane	0.01
Chlorfenac	45.0
Chlorothion	(x)
Chloroxuron	(x)
Chloropropham	(x)
Chlorthal	(x)
Coumaphos	0.001
Crotoxyphos	0.1
DDT	0.001
Demeton	(x)
Diazinon	0.009
Dicamba	200
Dichlobenil	37.0
Dichlone	0.2
Dichlorvos	0.001
Dieldrin	0.005
Dioxathion	0.09
Diphenamid	(x)
Diquat	0.5
Disulfoton	0.05
Diuron	1.6
2,4-D (PGBE)	(x)
2,4-D (BEE)	4.0
2,4-D (IOE)	(x)
2,4-D (Diethylamine salts)	(x)
2,2-DPA	110.0
Endosulfan	0.003
Endothal (Disodium salt)	(x)
Endothal (Dipotassium salt)	(x)
Endrin	0.002
EPTC	(x)
Ethion	0.02
Fenamosulf	(x)
Fenchlorphos	(x)
Fenoprop (BEE)	2.5
Fenoprop (PGBE)	2.0
Fenoprop (IOE)	(x)
Fenoprop (Potassium salt)	(x)
Fenthion	0.006
Heptachlor	0.001
Lindane	0.01
Malathion	0.008
MCPA	(x)
Methoxychlor	0.03
Mevinphos	0.002
Molinate	(x)
Monuron	(x)
Naled	0.004
Paraquat	(x)
Parathion	0.04
Parathion-methyl	(x)
Phorate	(x)
Pebulate	(x)
Picloram	(x)
Propanil	(x)
Propham	(x)
Propoxur	(x)
Pyrethrum	0.01
Rotenone	10.0
Simazine	10.0
Temephos	(x)
Trichlorophon	0.002
Trifluralin	(x)
Vernolate	(x)
C. *Miscellaneous*	
Ammonia (un-ionised)	20
Boron	(x)
Bromine (molecular)	(x)
Bromate	(x)
Chlorine (total residual)	2.0
Cyanide (free ion)	5.0
Fluoride	(x)
Phenolics	100
Phosphorus (elemental)	(x)
Polychlorinated biphenyls	0.001
Phthalate esters	0.3
Selenium	10
Sulphides (total)	2
Surfactants (LAS)	200
Radioactivity (gross)	10 pCi/l

(x) indicates insufficient information

TABLE 2

LIMITS FOR CHEMICAL COMPOUNDS IN WATER FOUND TO CAUSE TAINTING OF THE FLESH OF FISH AND OTHER AQUATIC ORGANISMS

Chemical	*Limit (mg/l)*	*Chemical*	*Limit (mg/l)*
Acetophenone	0.5	Ethanethiol	0.24
Acrylonitrile	18	Ethylacrylate	0.6
M-cresol	0.2	Formaldehyde	95
O-cresol	0.4	Gasoline	0.005
P-cresol	0.12	Kerosene	0.1
Cresylic acids (meta, para)	0.2	Kerosene plus kaolin	1
N-butylmercaptan	0.06	Isopropylbenzene	0.25
O-sec. butylphenol	0.3	Naphtha	0.1
P-tert. butylphenol	0.03	Napthalene	1
O-chlorophenol	0.001	Naphthol	0.5
P-chlorophenol	0.01	2-naphthol	0.3
2, 3-dichlorophenol	0.084	Dimethylamine	7
2, 4-dichlorophenol	0.001	α-methylstyrene	0.25
2, 5-dichlorophenol	0.023	Oil, emulsifiable	15
2, 6-dichlorophenol	0.035	Pyridine	5
2-methyl, 4 chlorophenol	0.075	Pyrocatechol	0.8
2-methyl, 6 chlorophenol	0.003	Pyrogallol	20
O-phenylphenol	1	Quinoline	0.5
2, 4, 6-trichlorophenol	0.003	P-quinone	0.5
Phenol	1	Styrene	0.25
Diphenyloxide	0.05	Toluene	0.25
β, β-dichlorodiethyl ether	0.09	Outboard motor fuel, as exhaust	0.5
P-dichlorobenzene	0.25	Guaiacol	0.082
Ethylbenzene	0.25		

TABLE 3

POTABILITY INDICATORS AND LIMITS FOR AESTHETIC OBJECTIVES

Indicator	*Limit*
A. *Physical*	
Colour (Pt-Co units)	50
Odour (TON)[1]	3
B. *Chemical*	(mg/l)
Ammonia (total as N)	0.5
Calcium (as Ca)	200
Chloride (as Cl)	250
Foaming Agents (as MBAS)	0.2
Hardness (as $CaCO_3$)	500
Iron (as Fe)	0.3
Magnesium (as Mg)	150
Manganese (as Mn)	0.05
Oil (mineral)	0.2
Organics (CCE + CAE)[2]	0.2
Phenolics	0.002
Sulphate (as SO_4)	250

(1) TON — Threshold Odour Number
(2) CCE — Carbon Chloroform Extract
CAE — Carbon Alcohol Extract

TABLE 4

TOXICANT LIMITS FOR THE PROTECTION OF POTABLE WATER SUPPLY

Toxicant	*Limit*
A. *Metals*	(μg/l)
Arsenic	50
Barium	1000
Cadmium	10
Chromium	50
Lead	50
Mercury	1
Selenium	10
Silver	50
B. *Pesticides*	(μg/l)
Aldrin	1
Chlordane	3
DDT	50
Dieldrin	1
Endrin	0.5
Heptachlor	0.1
Heptachlor epoxide	0.1
Lindane	5
Methoxychlor	1000
Total Organophosphates and Carbamates	100
Toxaphene	5
2, 4-D	20
2, 4, 5-TP	30
2, 4, 5-T	2
C. *Radionuclides*	(pCi/l)
Radium 226	0.5
Strontium 90	5
Gross α concentration	3
Gross β concentration	30
D. *Miscellaneous*	(mg/l)
Boron	1.0
Cyanide	0.05
Fluoride	1.5
Nitrate & Nitrite (as N)	10
Polynuclear aromatic hydrocarbons	0.0002

TABLE 5

TOXICANT LIMITS FOR THE PROTECTION OF AGRICULTURAL WATER SUPPLY

1. STOCK WATERING

Toxicant	*Limit*
A. *Metals*	(mg/l)
Aluminium	5.0
Arsenic	0.2
Cadmium	0.01
Calcium	700
Chromium	1.0
Cobalt	1.0
Copper	0.5
Lead	0.1
Magnesium	250
Mercury	0.002
Molybdenum	0.01
Selenium	0.02
Sodium	2000
Vanadium	0.1
Zinc	20.0
B. *Pesticides*	(µg/l)
Aldrin	1
Chlordane	3
DDT	50
Dieldrin	1
Endrin	0.5
Heptachlor	0.1
Heptachlor epoxide	0.1
Lindane	5
Methoxychlor	1000
Total Organophosphates and Carbamates	100
Toxaphene	5
2, 4-D	20
2, 4, 5-TP	30
2, 4, 5-T	2
C. *Radionuclides*	(pCi/l)
Radium 226	0.5
Strontium 90	5
Gross α concentration	3
Gross β concentration	30
D. *Miscellaneous*	(mg/l)
Boron	5.0
Chloride	1000
Fluoride	2
Nitrate & Nitrite (as N)	100
Nitrite (as N)	10
Sulphate	1000
Polynuclear aromatic hydrocarbons	0.0002
Carbon Chloroform Extract & Carbon Alcohol Extract	0.2
Phenolics	0.002

2. IRRIGATION SUPPLY

Toxicant	*Limit*
A. *Metals*	(mg/l)
Aluminium	5.0
Arsenic	0.1
Beryllium	0.1
Cadium	0.01
Chromium	0.1
Cobalt	0.05
Copper	0.20
Iron	1.0
Lead	5.0
Lithium	0.07
Manganese	0.20
Molybdenum	0.01
Nickel	0.2
Selenium	0.02
Vanadium	0.10
Zinc	2.0
B. *Miscellaneous*	(mg/l)
Boron	0.7
Fluoride	1.0

And the Honourable William Vasey Houghton, Her Majesty's Minister for Conservation for the State of Victoria, shall give the necessary directions herein accordingly.

L.G. HOUSTON
Acting Clerk of the Executive Council

No. 113—43092/81—2

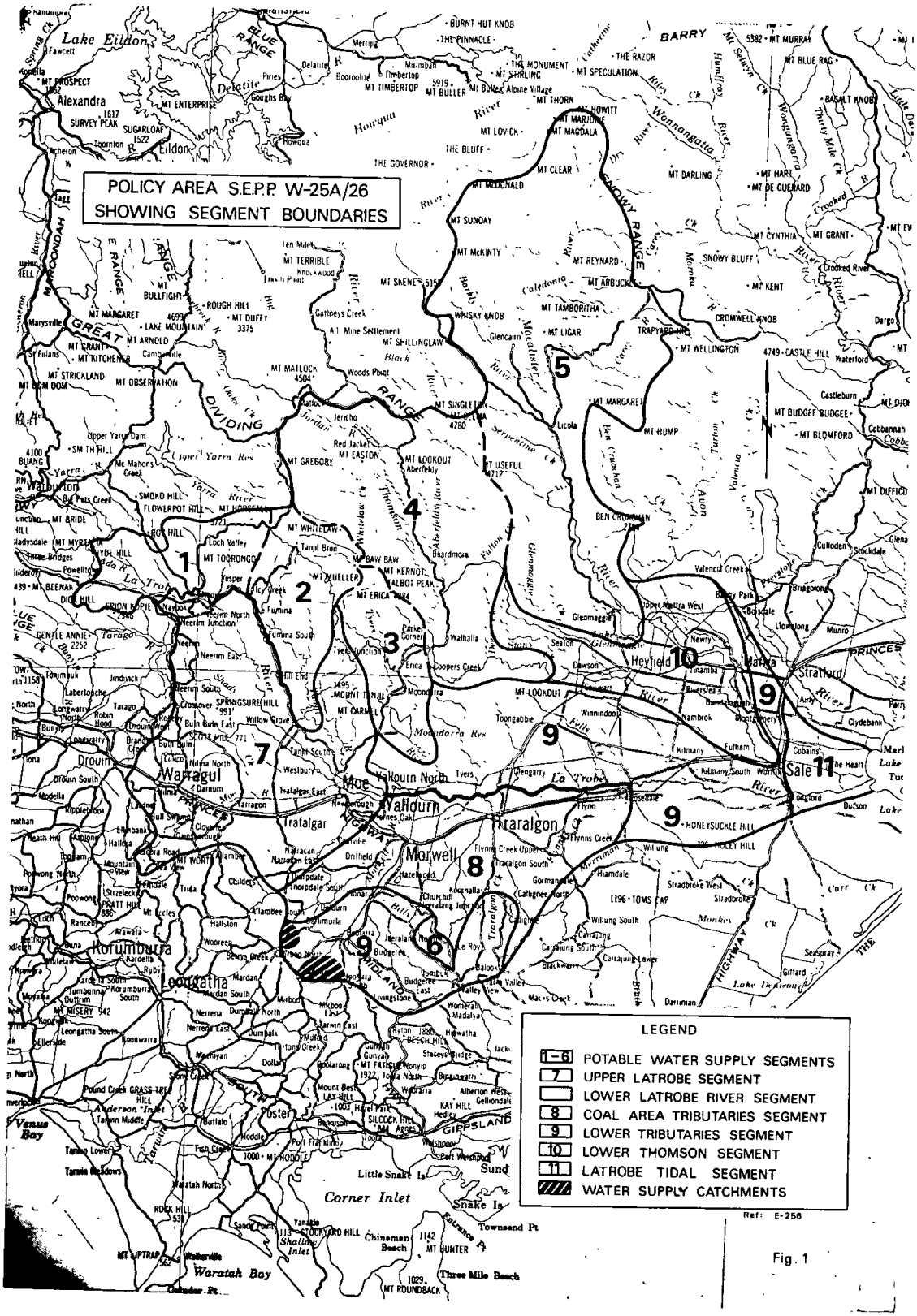
POLICY AREA S.E.P.P. W-25A/26
SHOWING SEGMENT BOUNDARIES
LEGEND
1–6 POTABLE WATER SUPPLY SEGMENTS
7 UPPER LATROBE SEGMENT
LOWER LATROBE RIVER SEGMENT
8 COAL AREA TRIBUTARIES SEGMENT
9 LOWER TRIBUTARIES SEGMENT
10 LOWER THOMSON SEGMENT
11 LATROBE TIDAL SEGMENT
WATER SUPPLY CATCHMENTS
Ref: E-256

Fig. 1

Environment Protection Act 1970

STATE ENVIRONMENT PROTECTION POLICY No. W-25A/26

(The Waters of the Latrobe River Catchment)

EXPLANATORY NOTES

On Tuesday 20 October 1981 the Governor in Council declared a State Environment Protection Policy (SEPP) for the waters of the Latrobe River catchment. This declaration was made under Section 16 of the Environment Protection Act 1970, on the recommendation of the Environment Protection Authority. The Policy comes into operation upon publication in the *Government Gazette.*

The Policy area covers the surface waters and groundwaters contained within the catchment of the Latrobe River and all its tributaries including the Thomson River and the Macalister River. (see Fig 1)

BACKGROUND

Since the commencement on 1 March 1973 of the waste discharge licensing provisions of the Environment Protection Act, waste discharge control has been exercised by the Authority through Sections 20 to 31 of the Act, having regard to Section 39 which, inter alia, provides that:

> . . . No person shall pollute any waters . . . so that the physical, chemical, or biological condition of the waters is so changed as to make . . . those waters . . . unclean, noxious, poisonous or impure, . . . detrimental to the health, welfare, safety . . . of human beings . . . or to any beneficial use . . .

Section 39 has been used as a basis for setting licence conditions in the Policy area in the absence of SEPP. The major waste discharge licences which have been granted in the Policy area are those for the power generating activities of the State Electricity Commission, the Australian Paper Manufacturers Ltd. pulp and paper mill at Maryvale, various sewerage authorities and two dairy factories.

This Policy was formulated to:

(1) formally establish a set of environmental objectives for existing discharges,

(2) provide guidance for future industrial and urban development (for which there is considerable potential given the area's brown coal resources); and

(3) address water quality management as it relates to factors other than licensable waste discharges.

A draft policy was issued for public comment for 3 months from March 1978. A number of submissions was received, and meetings were held with the authors to discuss many of these submissions. The Policy was revised in the light of these submissions and discussions and recommended by the Authority to the Government.

PURPOSE AND FUNCTION

The Policy to which these notes refer is a State Environment Protection Policy, as provided for in Sections 16-19 of the Environment Protection Act. Such a Policy is formulated in draft form by the Environment Protection Authority, circulated for public review and comment and, following any necessary revision, recommended by the Authority to the Governor in Council for declaration.

State Environment Protection Policy is an official declaration by the Government of Victoria of the nature and level of protection to be accorded to the environment. A Policy may relate to the environment in general or to some element or segment of the environment. Policies may be declared for air, water, land or noise or for a combination of these elements. They may encompass the whole State of Victoria or some particular area or areas within the State.

These policies provide a statutory basis for all decision-making in regard to environment protection and pollution control. All licensing of waste discharges must be in accord with the objectives specified in declared Policies. All Regulations made in relation to pollution control must be framed in the light of these objectives.

There are three main features of a State Environment Protection Policy:

1. Beneficial Uses
   A Policy identifies "beneficial uses" of the environment to be protected, i.e. ways in which the public derives benefit or enjoyment from the environment and which need protection from the effects of waste discharges or noise.
2. Quality Objectives
   The beneficial uses determine the level of environmental quality that must be achieved and maintained. If a waterway is to be protected for the purpose of swimming, the water quality obviously needs to be higher than in the case where it is to be protected as a watering place for stock. The quality objectives in a Policy constitute the level of environmental quality that is needed to protect the beneficial uses.
3. Attainment Programme
   As far as possible, a Policy does not stop at defining quality objectives, but also outlines a management programme whereby the objectives can be achieved and maintained. The requirements set forth in the attainment programme are to be implemented by various government agencies such as the EPA.

THE POLICY IN GENERAL

The Policy reflects varying levels of water quality which are highest in the forested mountain areas, lowest in the coal/industrialized areas and between these levels in rural areas. The Policy accepts lower water quality with respect to temperature and total dissolved solids in streams under the influence of existing and committed power station discharges on the basis of the excessive costs required to upgrade these older technologies. In these cases protection of ecosystems or modified ecosystems are not identified beneficial uses but passage of fish is protected in recognition of migratory fish species. Future power stations or other industries on unaffected streams will be required to meet more stringent objectives.

The Policy area is divided into eight segments based on the beneficial uses to be protected in each case (see Figure 1 accompanying the Policy).

a. Potable Water Supply Segments
b. Upper Latrobe Segment
c. Lower Latrobe River Segment
d. Coal Area Tributaries Segment
e. Lower Tributaries Segment
f. Lower Thomson Segment
g. Latrobe Tidal Segment
h. Groundwater Segment

A summary of the beneficial uses protected in each segment is given in Table 1 of these notes. Existing and potential uses have been assessed in identifying these beneficial uses.

WATER QUALITY OBJECTIVES

Water quality indicators and objectives have been specified for each segment on the basis of the most limiting beneficial use for each indicator, i.e. the beneficial use that imposes the most stringent water quality requirements with respect to each indicator.

Different beneficial uses can result in different quality objectives. For example in the Potable Water Supply Segments the quality objective in terms of *E.coli* is 10 organisms per 100 ml (95 percentile) to protect drinking water supply; whereas in the Lower Latrobe River, which is not used for drinking water supply, the objective is 200 organisms per 100 ml (geometric mean) to protect swimming.

The main difference however is in the level of protection afforded to the aquatic ecosystem in each segment. This is reflected mainly in the toxicant, temperature and dissolved oxygen objectives.

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TABLE 1 SUMMARY OF PROTECTED BENEFICIAL USES

GROUNDWATER	LATROBE TIDAL	LOWER THOMSON	LOWER TRIBUTARIES	COAL AREA TRIBUTARIES	LOWER LATROBE RIVER	UPPER LATROBE	POTABLE WATER SUPPLY	SEGMENT	
●		●	●*			●	●	disinfection treatment	POT
● ●	●	● ●	● ●	● ●	● ●	● ●	● ●	stockwater irrigation	AGR
●		●	●	●	●	●	●		IND
	● ● ●	● ● ●	● ●	● ●	● ● ●	● ● ●	● ● ●	primary contact secondary contact passive	REC
	●	●	●	●*	●*	●	●		PRO
	●	●	●			●	●	level III protection level IV protection	ECO
				●*	●*				MOD
				●*	●*				PAS
	●	●	●	●	●	●	●		VEG
		●	●	●	●	●	●		AQU
●	●	●	●	●	●	●	●		FLU

*beneficial use applies to part of segment.

POT — Potable water supply
AGR — Agricultural water supply
IND — Industrial water supply
REC — Recreation
PRO — Production of edible fish and other aquatic life
ECO — Maintenance and preservation of aquatic ecosystems and associated wildlife
MOD — Maintenance of modified ecosystems
PAS — Passage of fish
VEG — Maintenance and preservation of riparian vegetatior
AQU — Recharging of aquifers
FLU — Flushing water and replenishment water

Table 2 of these notes summarizes the water quality objectives for each segment.

ATTAINMENT PROGRAMME

The attainment programme consists of two parts — general provisions (clauses 19-22) and detailed provisions (clauses 23-44). The general provisions are an outline of the management means required to implement the Policy, and provide a basis for more detailed implementation plans. The detailed provisions are a forerunner of implementation plans which highlight water quality management problems and outline mechanisms and actions for their solution. Those actions which can be identified from the start as necessary for the achievement of the Policy are already included in the detailed provisions of the attainment programme. Responsibility for the various actions rests with all Government agencies in so far as their powers, duties and responsibilities relate to the provisions of the Policy.

As the Latrobe River is a major input to the Gippsland Lakes, several of the attainment provisions are as much directed towards these water bodies as the Latrobe catchment itself. This particularly applies to nutrients and conservative toxicants such as heavy metals. The major aspects of water quality management addressed in the attainment programme are nutrient loads, discharges in the Potable Water Supply Segments , filterable residue (total dissolved solids) and turbidity.

In respect of nutrient loads the Policy limits the net increase in licensed nutrient loads to 35 kg/day phosphorus and 300 kg/day nitrogen (clause 27 i). The Latrobe River currently accounts for about 50% of the nutrient inflow to Lake Wellington with loads of 421 kg/day phosphorus and 4586 kg/day nitrogen. Licensed loads whilst representing less than 25% of the Latrobe River loads are the most controllable portion of the load. Given the delicate nature of the Gippsland Lakes and the high ecosystem and recreational values placed on them, the Policy adopts the prudent approach of limiting increases in nutrient loads as far as practicable. Increase in nutrient loads could cause undesirable weed and algal growth in the Lakes, and further research is needed on this topic.

TABLE 2 SUMMARY OF WATER QUALITY OBJECTIVES

Indicator	*Unit*	*Water Supply Segments*	*Upper Latrobe River Segment*	*Lower Latrobe River Segment*	*Coal Area Tribs. Segment*	*Lower Tribs. Segment*	*Lower Thomson Segment*	*Latrobe Tidal Segment*	*Groundwater Segment*
DISSOLVED OXYGEN	mg/l % sat.	> 7.5 > 75	> 6.0 > 60	> 4.5 > 45	>4.5 >45	> 6.0 > 60	> 6.0 > 60	> 6.0 > 60	background
BACTERIA (E.COLI)	org/100 ml	95% < 10	90% < 100	80% < 400 mean < 200	80% 2000 mean 1000	80% < 2000 mean < 1000 water supply catch. 90% < 100	90% < 100	80% < 400 mean < 200	background
pH	units	± 0.5 6.0 – 8.5	± 0.5 6.0 – 8.5	± 0.5 6.0 – 8.5	± 0.5 6.0 – 8.5	± 0.5 6.0 – 8.5	± 0.5 6.0 – 8.5	± 0.5 6.0 – 8.5	background
TEMPERATURE	variation °C	< 2	< 2	U/S of Traralgon Ck: <4 summer <6.5 winter D/S Traralgon Ck: <4	Morwell River: <5 summer <10 winter Traralgon Ck: <4 summer <6 winter Other: <4	< 2	< 2	< 2	background
FILTERABLE RESIDUE	mg/l	< 10% variation	< 10% variation	Rosedale < 450 U/S APM < 350	<1000	≤ 500	< 10% variation	< 10% variation	background
LIGHT PENETRATION		(a)	(a)	(a)	(a)	(a)	(a)	(a)	—
TOXICANTS	Formula (b)	<N + 0.5(T – N)	< T	< 2T (c)	<2T (c)	< T	< T	< T	background
NUTRIENTS AND BIOSTIMULANTS	Qual.	(d)	(d)	(d)	(d)	(d)	(d)	(d)	background
AESTHETIC QUALITY — odours taints colours	Qual.	(e)	(e)	(e)	(e)	(e)	(e)	(e)	background
— floatable matter	Qual.	(f)	(f)	(f)	(f)	(f)	(f)	(f)	background
SETTLEABLE MATTER	Qual.	background	(g)	(g)	(g)	(g)	(g)	(g)	background

NOTES:

Greater than, Less than, – not applicable, % per cent, mg/l milligrams per litre, org/100 ml organisms per 100 millilitre, pH units Scale 0-14 where 7 equals neutral, °C degree centigrade, Qual. qualitive objective.

(a) The combined effect of turbidity and colour not to reduce light transmission by more than 10% over a standard path length.

(b) Formula as specified where N equals natural background level, T equals threshold concentration of chronic sublethal effects (estimated level, ITE or Tables 4 and/or 5). Sum of fractions of measured/appropriate levels is less than 1.0 except for (c).

(c) Sum of fractions of measured/appropriate levels is less than 2.0.

(d) No excessive or nuisance growths of aquatic plants.

(e) No objectionable odours taints or colours (Table 2 and Table 3).

(f) No visible floating oil, grease, scum, litter or other objectionable matter.

(g) No detrimental effect on protected beneficial uses.

In the Potable Water Supply Segments the Policy (clause 27 ii) prevents the grant of further discharge licences with the exception of domestic wastewater effluent from existing settlements which may be granted a combined land/water discharge licence. This approach is designed to eliminate risks associated with discharges and thus protect the existing high water quality which is suitable for potable water supplies without any need for treatment at present.

A licence limit of 1000 mg/l for filterable residue is imposed on discharges in the Coal Area Tributaries Segment (clause 27 iii). This will aid in maintaining suitable levels for irrigation and ecosystems downstream in the catchment.

Turbidity problems are addressed in a number of ways in clause 34. Construction work is required to be carried out in accordance with SCA guidelines, streambank stabilisation techniques including the establishment of buffer zones are to be applied where necessary and land disturbance is to be minimised during forestry operations.

Other requirements of the Policy concern heavy metal discharges, provision of sewerage, and agricultural waste disposal. Heavy metal discharges from specified industries are limited to levels consistent with traditional technology (clause 29) because of the conservative nature of these pollutants and their capacity to accumulate in the environment. This provision does not prevent the application of more restrictive limits if this should be necessary to achieve the objectives. The provision of sewerage is required for all new subdivisions except for single subdivisions of less than 10 allotments (clause 31 a). Existing subdivisions where domestic waste cannot be disposed on-site are also required to be sewered (clause 31 b). This will enable problems associated with *E.coli* and organic wastes from unsewered settlements particularly upstream of Yallourn storage to be overcome. Requirements for the location of intensive animal industries (clause 38) and for the disposal of wastes from such industries (clause 39) are designed to minimise adverse effects of these wastes by making maximum use of land disposal at locations away from water bodies.

Minimum flow in the Latrobe River is specified (clause 40) in order to aid the assessment of the assimilative capacity of waste discharges and hence determine licence conditions. The flows specified are those which have been established by water resource agencies. For the Thomson and Macalister Rivers the Policy (clause 41) recognises the need for minimum flows to be specified but that sufficient information is not currently available.

Related activities essential to the implementation of the Policy are the conduct of a monitoring program (clause 43), the results of which would be used to assess the results of Policy implementation, and public education (clause 44) which will enable more informed participation in water quality management.

By Authority F D Atkinson Government Printer Melbourne