

**Colin
Biggers
& Paisley**

Journal of

**Legal
Knowledge
Matters.**

Volume 5. 2000

**Planning Government Infrastructure
and Environment group**

Our Planning Government Infrastructure and Environment group.

Colin Biggers & Paisley's Planning Government Infrastructure and Environment group is the trusted partner of public and private sector entities, for whom we are the legal and policy designers of strategic and tactical solutions to exceptionally challenging problems, in our chosen fields of planning, government, infrastructure and environment.

Our group has developed a longstanding reputation for continual and exceptional performance in the planning, designing and execution of legal and policy solutions for large development and infrastructure projects in Australia, including new cities, towns and communities.

We are passionate about planning, government, infrastructure and environment issues, and we pride ourselves on acting for both the private and public sectors, including private development corporations, listed development corporations, other non-public sector entities and a wide range of State and local government entities.

The solutions we design extend beyond legal and policy advice, and represent sensible, commercially focused outcomes which accommodate private interests in the context of established public interests.

Our specialist expertise and experience

Our Planning Government Infrastructure and Environment group is recognised for our specialist expertise and experience.



Planning

Strategic and tactical planning of development issues and processes for projects, in particular major residential communities, retail, commercial and industrial developments.



Infrastructure

Specialist expertise and experience in infrastructure planning, funding and delivery.



Government

In-depth understanding of government legislation, policy and processes.



Environment

Legal excellence in all areas of environmental law and policy.

Contents

INDEX	ii
TABLE OF LEGISLATION	iv
TABLE OF CASES	vii
Legislation background study – Water recycling strategy	1
Review of recent developments in planning and environment law in Australia	102
LGOLA: The impact on local governments and the professionals who deal with them	109
Preparation of land use planning instruments: The legal and technical challenges	130
Sustainability – The 21st Century agenda: Future directions in environmental law and policy	150
Review of the most recent developments in planning and environment law including changes to registrable environment covenants and road transport reform	169
Environmental News – Queensland – Vegetation Management Act 1999	173
Environmental News – Queensland – Environmental Protection and Other Legislation Amendment Bill 2000	174
Environmental News – Interstate and National – Environment Protection and Biodiversity Conservation Act 1999	175
Legislation and Policy – Planning and management of coastal development	177
Legislation and Policy – Land access and telecommunications – What you need to know	178
Legislation and Policy – Product Stewardship (Oil) Act 2000 (Cth)	179
Review of various planning legislation and policies	180

Index

"Brick and tile" covenants	169
Acid Sulphate Soils.....	177
Adult entertainment permit.....	181
Appeal rights for submitters.....	117
Applicant to suspend their appeal period.....	118
Assessment manager	118
Assessment of the impacts of the recycled water on the environment	23
Authority to issue an enforcement notice.....	124
Baseline benchmarks	132
Benchmarks are the key environmental conditions.....	132
Bind successors in title	169
Biological criteria.....	21
Change the conditions of a rezoning approval.....	127
Chapter 2A – Environmental Impact Statements.....	176
Chapter 2B – Development Approvals and Environmental Authorities	176
Chapter 2C – Environmental Authorities for Mining Activities.....	176
Coastal management plan.....	13
Code of Practice for Onsite Sewerage Facilities.....	105
Codes of Environmental Compliance.....	174
Codes of practice.....	18
Community infrastructure.....	128
Concepts of environmental value and environmental harm	15
Controlled actions.....	175
Decision notices.....	117
Desired environmental outcomes	131, 132, 133, 134, 135
Development control legislation.....	151
Development of environmental regulation	152
Ecological integrity.....	153
Ecological sustainability.....	130, 131, 133, 135, 136
Economic performance indicators.....	133
Economic recycling and reuse of waste oil.....	179
Enforcement powers will be expanded	155
Engineers liable for negligence.....	103
Environmental Management Overview Strategy.....	10
Environmental performance indicators	133
Environmental regulation.....	150, 151, 152, 154, 155, 156, 168
Environmental values	1, 19, 20, 21, 23
Environmentally Relevant Activities.....	174, 175
Equity is also a key objective of sustainability	153
Explicit conduct lawful.....	181
Facilitation measures.....	131
Future competencies of environmental practitioners	156
Give local governments the discretion whether to amend their planning schemes.....	120
Goal of sustainability.....	152
Illustration of key concepts	132
Inconsistencies between planning scheme policies.....	120
Integrated planning framework	130
Inter-generational equity	154
Intra-generational equity	154
Jurisdiction of tribunals	123
Kyoto protocol.....	103
Land use planning	130, 168
LGOLA.....	109
Liability for substandard work	170
Liveability of the physical environment	153
Major concerns for wastewater recycling.....	3
Management of ASS.....	177
Material change of use application	120
Matters that an enforcement order may relate to.....	124
National Environmental Health Strategy	103
New chapters into the EP Act.....	176
New Queensland Road Rules	170
New water industry legislation	7
North Queensland Conservation Council.....	180
Nuisance abatement notice	172

Index (cont'd)

Oil Stewardship Scheme	179
Performance indicators.....	131, 132, 133, 134, 135
Person to enter into an infrastructure agreement with a public sector entity.....	124
Person to prosecute a person in a Magistrates Court for a development offence	124
Physical and social environmental impacts of wastewater recycling	11
Plans for a reconfiguration that is not assessable development	122
Pollution abatement order.....	102
Pollution prevention approach	20
Power to issue enforcement notices has also been expanded	113
Power to issue show cause notices has also been expanded	113
Preliminary approvals give the planning process flexibility	120
Preservation of native vegetation and ecosystems.....	173
Principle is the precautionary principle	154
Principle of accountability	155
Principle of community participation	155
Principle of environmental justice	154
Principle of global responsibility.....	155
Principle of irreversibility	154
Principle of preventative action	154
Principle of stewardship.....	155
Product stewardship for waste oil	179
Project life cycle controls	151
Protect existing lawful uses of premises	118
Protects an implied right to use premises	119
Purpose of acknowledgment notices	121
QPWS.....	180
Queensland Department of Natural Resources Background Studies	1
Queensland government's State Planning Policy 1/00	177
Receiving Water Quality Objectives Approach	1, 24
Reconfiguration plans for the purpose of resuming land are exempted.....	122
Recycled wastewater in relation to mining activities	10
Regional ecosystem maps.....	173
Registrable covenant	169
Registrable environmental covenants.....	169
Regulation of wastewater recycling is geographically limited to protected areas.....	16
Resource management legislation.....	151
Restrictive covenants.....	184
Rezoning approval.....	127
Risks with footpath maintenance	180
Safe and healthy environments	103
Second Reading Speech	184
Sexually explicit live entertainment.....	181
Significant implications for environmental practitioners	156
Social performance indicators	133
Specific noise offences	172
Standard Sewerage Law	7
Standard Water Supply Law	8
Statutory water resource planning process.....	183
Subdivision conditions	103
Target benchmarks.....	132
Telecommunications Low-Impact Facilities Determination 1997	178
Telecommunications Ombudsman	178
The "Drake test".....	17
Threshold standards for achieving regulatory control	19
Two-part tariff is based on consumption for the purposes of section 783(b).....	112
Type of performance indicators	133
Uniform effluent standards.....	19
Unlawful environmental nuisance	172
Water cycle management infrastructure	128
Water management plans.....	183
Water Recycling Strategy	1, 2, 3, 4, 5, 10, 12, 13, 16, 17, 20, 21, 23
Water use plans.....	183
Whether recycled water would be discharged into a marine park.....	15
World's first carbon rights legislation	103

Table of Legislation

Commonwealth

<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i>	105
<i>Australia New Zealand Food Authority Act 1991</i>	57
<i>Customs Tariff Act 1995</i>	179
<i>Customs Tariff Amendment (Product Stewardship for Waste Oil) Act 2000</i>	179
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	155, 175
<i>Environmental Protection (Impact of Proposals) Act 1974</i>	151
<i>Excise Tariff Act 1921</i>	179
<i>Excise Tariff Amendment (Product Stewardship for Waste Oil) Act 2000</i>	179
<i>Food Standards Australia New Zealand Act 1991</i>	8
<i>Food Standards Australia New Zealand Regulations 1994</i>	56
<i>Product Grants and Benefits Administration Act 2000</i>	179
<i>Product Stewardship (Oil) Act 2000</i>	179
<i>Product Stewardship (Oil) Regulation 2000</i>	179
<i>Telecommunications Act 1997</i>	178
<i>Telecommunications Code of Practice 1997</i>	178

New South Wales

<i>Environmental Offences and Penalties Act 1989</i>	18
<i>Local Government Act 1993</i>	6, 109, 110, 111, 112, 113, 118, 129, 156, 180, 182

Queensland

<i>Aboriginal Relics Preservation Act 1967</i>	104
<i>Acquisition of Land Act 1967</i>	122, 128
<i>Agricultural Chemicals Distribution Control Act 1966</i>	24
<i>Agricultural Standards Act 1994</i>	30
<i>Apiaries Act 1982</i>	12
<i>Beach Protection Act 1968</i>	13, 14
<i>Body Corporate and Community (Management Act) 1997</i>	85
<i>Brands Act 1915</i>	12
<i>Building Act 1975</i>	7, 113, 114, 123, 129
<i>Building and Construction Industry (Portable Long Service Leave) Act 1991</i>	114
<i>Building Units and Group Titles Act 1980</i>	85
<i>Chemical Usage (Agricultural and Veterinary) Control Act 1988</i>	11, 12, 24
<i>Chemical Usage (Agricultural and Veterinary) Control Regulations 1989</i>	29
<i>City of Brisbane (Town Plan) Act 1959</i>	151, 168
<i>City of Brisbane Act 1924</i>	109, 113, 129
<i>City of Brisbane Town Planning Act 1964</i>	151, 168
<i>Clean Air Act 1963</i>	151, 168
<i>Clean Waters Act 1978</i>	151, 168
<i>Coastal Protection and Management Act 1995</i>	14, 104, 151, 153, 168
<i>Contaminated Land Act 1991</i>	151, 168
<i>Cultural Records (Landscapes Queensland and Queensland Estate) Act 1987</i>	104
<i>Environmental Protection (Interim Waste) Regulation 1996</i>	62
<i>Environmental Protection (Water) Policy 1997</i>	1, 15, 21, 23, 84
<i>Environmental Protection Act 1994</i>	1, 2, 9, 10, 14, 15, 18, 21, 22, 23, 24, 42, 45 46, 47, 51, 66, 67, 77, 96, 151, 168, 174, 175
<i>Environmental Protection and Other Legislation Amendment Bill 2000</i>	174, 175
<i>Environmental Protection Regulation 1998</i>	34, 42, 169, 171
<i>Fisheries Act 1994</i>	12, 24, 52
<i>Fisheries Regulation 1995</i>	54
<i>Forestry Act 1959</i>	10, 58
<i>Forestry Regulation 1998</i>	58
<i>Gaming Machine Act 1991</i>	107
<i>Gladstone Area Water Board Act 1984</i>	182
<i>Health Act 1937</i>	8, 9, 25
<i>Health Regulation 1996</i>	60
<i>Integrated Planning Act 1997</i>	6, 7, 9, 13, 14, 22, 26, 34, 41, 66, 68, 70, 71, 73, 84, 85, 89, 90, 102, 103 104, 105, 107, 109, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124 125, 126, 127, 128, 129, 130, 151, 153, 168, 169, 170, 173, 174, 176, 181, 182

Table of Legislation (cont'd)

Queensland (cont'd)

<i>Integrated Planning and Other Legislation Amendment Act 1998</i>	129
<i>Integrated Planning and Other Legislation Bill 2000</i>	6
<i>Integrated Planning Regulation 1998</i>	66, 129
<i>Justices Act 1886</i>	171
<i>Justices Regulation 1993</i>	171
<i>Land Act 1994</i>	152, 153, 168, 169, 173
<i>Liquor (Approval of Adult Entertainment Code) Regulation 2000</i>	181
<i>Liquor Act 1992</i>	105, 107, 172, 181
<i>Litter Act 1971</i>	151, 168
<i>Local Government (Chinatown and the Valley Malls) Act 1984</i>	129
<i>Local Government (Planning and Environment) Act 1990</i>	67, 68, 71, 103, 116, 117, 120 123, 126, 127, 128, 135, 168
<i>Local Government (Queen Street Mall) Act 1981</i>	129
<i>Local Government (Robina Central Planning Agreement) Act 1992</i>	128
<i>Local Government Act 1936</i>	151, 168
<i>Local Government Act 1990</i>	73
<i>Local Government and Other Legislation Amendment Act (No. 2) 1999</i>	104
<i>Local Government and Other Legislation Amendment Bill 2000</i>	109
<i>Local Government Regulation 1994</i>	72
<i>Marine Parks Act 1982</i>	15
<i>Marine Parks Regulation 1990</i>	74
<i>Metropolitan Water Supply and Sewerage Act 1909</i>	182
<i>Mineral Resources Act 1989</i>	9, 10, 13, 90, 174, 176
<i>Mineral Resources Regulation 1990</i>	76
<i>Natural Resources and Other Legislation Amendment Act 2000</i>	169
<i>Nature Conservation Act 1992</i>	15, 16, 55, 65, 152, 153, 168, 169
<i>Nature Conservation Regulation 1994</i>	78
<i>Noise Abatement Act 1978</i>	151, 168
<i>Petroleum Act 1923</i>	182
<i>Planning and Environment Court Rules 1999</i>	117
<i>Prostitution Act 1999</i>	105, 106, 181, 182
<i>Prostitution Regulation 2000</i>	181
<i>Queensland Heritage Act 1992</i>	105
<i>River Improvement Trust Act 1940</i>	28
<i>Road Transport Reform Act 1999</i>	171
<i>Road Transport Reform Regulation 1999</i>	171
<i>Sewerage and Water Supply Act 1949</i>	6, 7, 8, 182
<i>South East Queensland Water Board (Reform Facilitation) Act 1999</i>	129
<i>Standard Building Regulation 1993</i>	125
<i>State Development and Public Works Organisation Act 1971</i>	13, 104, 151, 168, 182
<i>State Housing Act 1945</i>	125
<i>Stock (Maximum Chemical Residue Limits) Regulation 1989</i>	93, 95
<i>Stock Act 1915</i>	12
<i>Traffic Act 1949</i>	170
<i>Traffic and Other Legislation Amendment Regulation (No. 1) 1999</i>	171
<i>Traffic Regulation 1962</i>	171
<i>Transport Infrastructure (Roads) Regulation 1991</i>	171
<i>Transport Infrastructure Act 1994</i>	106, 127, 128, 129
<i>Transport Operations (Passenger Transport) Act 1994</i>	127
<i>Transport Operations (Road Use Management) Act 1995</i>	171
<i>Transport Operations (Road Use Management) Regulation 1995</i>	171
<i>Transport Operations (Road Use Management – Motor Vehicles Safety) Transitional Regulation 1994</i>	171
<i>Transport Operations (Road Use Management – Road Rules) Regulation 1999</i>	170
<i>Transport Operations (Road Use Management – Vehicle Registration) Regulation 1999</i>	171
<i>Transport Operations (Road Use Management – Vehicle Standards and Safety) Regulation 1999</i>	171
<i>Vegetation Management Act 1999</i>	104, 151, 153, 168, 173
<i>Vegetation Management Amendment Act 2000</i>	173
<i>Vegetation Management Regulation 2000</i>	173
<i>Water (Allocation and Management) Bill 1999</i>	152, 168
<i>Water (Allocation and Management) Bill 2000</i>	11
<i>Water Act 2000</i>	182
<i>Water Resources Act 1989</i>	10, 11, 52, 182
<i>Water Resources Regulation 1999</i>	96
<i>Workplace Health and Safety Act 1995</i>	9
<i>Workplace Health and Safety Regulation 1997</i>	99

Table of Legislation (cont'd)

Victoria

<i>Heritage Act 1995</i>	184
<i>Planning and Environment Act 1987</i>	184
<i>Planning and Environment (Restrictive Covenants) Bill 2000</i>	184
<i>Property Law Act 1958</i>	184
<i>Victorian Conservation Trust Act 1972</i>	184

Western Australia

<i>Town Planning and Development Act 1928</i>	102
---	-----

Table of Cases

<i>British Oxygen Co Ltd v Minister for Technology</i> [1971] AC 625	17
<i>Crombie v Livingstone Shire Council & Anor</i> [2000] QCA 229.....	180
<i>Davies v Western Australia</i> (1904) 2 CLR 29	22
<i>Environmental Protection Authority v Ampol Ltd</i> (1994) 82 LGERA 247	18
<i>Fowler v Brisbane City Council</i> (1969) 20 LGRA 523	17
<i>Fraser Parkes Limited v Lang Michener Lawrence and Shaw</i> (1999) Vancouver C918006	102
<i>Gold Coast City Council v Hall</i> [2000] QCA 92	180
<i>Hume Doors & Timber (Qld) Pty Ltd v Logan City Council</i> [2000] QCA 389.....	110, 111, 112
<i>Ipswich City Council v Cuthbertson & Ors</i> , Planning and Environment Application No. 2897 of 1998.....	103, 170
<i>North Queensland Conservation Council Inc v Executive Director, Queensland Parks and Wildlife Service</i> [2000] QSC 172.....	180
<i>Pyrenees Shire Council v Day</i> [1998] 151 ALR 147.....	181
<i>Ryan v Great Lakes</i> [1999] FCA 177	181
<i>Vadale Pty Ltd v Landsborough Shire Council</i> (1985) QPLR 338.....	17
<i>Woollahra Municipal Council v The Minister</i> (1991) 23 NSWLR 710	5



Legislation background study – Water recycling strategy

Dr Edward Christie | Ian Wright | Natalie Hewitt

This article discusses the review and analysis of Queensland statutes in relation to water recycling. The article provides an in-depth examination of Queensland legislation, policies, guidelines and codes to justify the need to establish a new regulatory regime for water recycling in Queensland

January 2000

Executive summary

The Water Recycling Strategy seeks to maximise the use of urban, industrial and rural effluent in Queensland in a manner that is efficient and economically and environmentally sustainable without causing adverse health effects.

It is recognised that the use of recycled water is currently regulated by a myriad of rules and regulations contained in existing legislation. Moreover, it is recognised that there is a requirement in Queensland for a single water recycling document which is outcome focussed and applicable to the establishment of any water recycling scheme.

A review and analysis of twenty two existing Queensland statutes, administered by seven Queensland State government departments, was undertaken. The focus was on the object and relevant provisions of each statute in relation to the scientific concerns associated with wastewater recycling, as identified in the Queensland Department of Natural Resources Background Studies prepared as part of the Water Recycling Strategy. Specifically, the scientific concerns of water quality, potential health impacts, environmental (ecological, social, economic) impacts and the requirements of ecologically sustainable development.

The role of delegated legislation, policies, guidelines and codes of practice in the legal decision-making process was then considered in terms of the broader legal framework of the Water Recycling Strategy.

Following this review and analysis, an assessment of the need to establish a new regulatory regime for water recycling in Queensland, as distinct from relying on existing legislation, was made. Objective criteria used in this assessment reflected, amongst other things, the need for certainty in regulatory control for the very broad array of uses envisaged by the Water Recycling Strategy.

It is concluded that existing legislation effectively addresses the scientific concerns identified in the Queensland Department of Natural Resources Background Studies and associated with the broad array of proposed uses for recycled water. It is further concluded that existing legislation would provide certainty and immediate regulatory control for water recycling with one qualification, namely that the key issues which address the requirements for the scientific and legal standards can be integrated into the decision-making process.

It is considered that the appropriate degree of regulatory control for water recycling could be best achieved by incorporating the Water Recycling Strategy into one piece of legislation, administered by one Queensland State government department. Such a model would be plausible should the water recycling activities proposed as part of the Water Recycling Strategy be prescribed as environmentally relevant activities under the *Environmental Protection Act 1994*. As a consequence, regulatory control of water recycling would come within the provisions of the *Environmental Protection Act 1994*, together with its complementary environmental protection policies.

One primary advantage of reliance on only the one piece of legislation is certainty in decision-making. Problems of inconsistency between conditions that could be imposed between different pieces of legislation, including the legislative power permitted under different objects, would be avoided. Further benefits of reliance on the *Environmental Protection Act 1994* for regulatory control of water recycling activities are discussed.

There may be a need to ensure that the meaning of 'environmental values', as defined in the *Environmental Protection Act 1994* and the *Environmental Protection (Water) Policy 1997*, is construed widely. This is specifically the case to ensure that environmental risk and health impacts are incorporated within the statutory meaning. Alternatively, there may be a need to revise or to amend the existing statutory definitions.

Based on a critique of possible scientific approaches to the regulatory control of water quality, it is considered that the Receiving Water Quality Objectives Approach should be the preferred model for the Water Recycling Strategy. In the context of the Water Recycling Strategy, it is probably best to refer to the preferred model as the Receiving Environment Objectives Approach. A significant feature for the Water Recycling Strategy would be the assessment of the impacts of the recycled water on the environment to which it is applied. Accordingly, the sensitivity of the receiving environment would be central to all water recycling activities. Moreover, the Receiving Environment Objectives Approach recognises that the receiving environment may be terrestrial, aquatic or marine, each environment having a different capacity with respect to resilience and hence, ecological health.

It is concluded that any attempt to rely on uniform standards rather than site specific standards based on the sensitivity of the receiving environment, will lead to significant constraints for the regulatory control of water recycling.

It is further concluded that a code of practice should be an integral, unifying element of the Water Recycling Strategy.

Two alternative models for the role of codes of practice with respect to the regulatory control of the use of recycled water were considered. The first model was for a code of practice to act as a defence to causing unlawful environmental harm. That is, statutory exclusion of liability if recycled water use was carried out in accordance with the code of practice. The second model was for a code of practice to represent a relevant consideration as a defence to causing unlawful environmental harm. That is, the court would have discretion to apply the code in its decision-making process.

It is concluded that for a code of practice to act as an effective legal defence for causing unlawful environmental harm, and to be consistent with the legal and scientific standard, there should be no uncertainty in its scientific application. If this were not the case, regulatory decision-making may be placed in jeopardy. For a code of practice to be a good legislative device for regulatory control, the extent to which science can specify threshold values or indicators for water quality or particularise the meaning of key terms and concepts for recycled water consistent with the scientific standard, is paramount.

Structured negotiation processes, such as the scientific round-table, are discussed as the most suitable means to resolve divergent viewpoints on scientific issues related to the scope and context of a code of practice for the regulatory control of water recycling.

It is noted that the current review of Queensland water industry legislation may produce new legislation which may provide an alternative regulatory regime to that which is currently provided by the *Environmental Protection Act 1994*. In particular, it is suggested that there is no reason why a personal licensing regime could not be established under the proposed Water (Infrastructure and Service Regulation) Bill in respect of the operation of wastewater reuse schemes provided that the legislation is structured to address the scientific and legal concerns identified in this Report and other Background Studies produced as part of the Water Recycling Strategy.

Introduction

The water recycling strategy

*"The Government is strongly committed to maximising wastewater reuse in the State and realises that this can only be done by the community's acceptance of effluent as a valuable resource not a waste."*¹

*"Queensland should vigorously promote industrial recycling and should encourage the active participation of industries, industry associations, local government and the wider community."*²

*"Stormwater recycling is a viable option for Queensland. There would appear to be no serious impediments to prevent significantly greater recycling of our stormwater resource than presently occurs."*³

*"Overall there is a potential for increasing water recycling for Queensland agriculture... There is sufficient technology to treat water to standards desired for recycling in agriculture."*⁴

These statements encapsulate the boundaries for the Legislation Background Study. The statements acknowledge the goal of the Water Recycling Strategy to make the greatest use of our water for the development of the State of Queensland. Furthermore, the statements acknowledge that such a goal should be counter-balanced with the need to ensure that public health and environmental concerns of the community and industry are not in any way compromised.

¹ Queensland Department of Natural Resources (1998) *Queensland Wastewater Reuse Strategy*, p (iii).

² Kinhill (1998) *Industry Water Recycling Background Study*, p (i).

³ WBM Oceanics (1999) *Stormwater Recycling Background Study*, p 2.

⁴ Queensland Department of Primary Industry (1999) *Agriculture Recycling Background Study*, p 2.

The Water Recycling Strategy recognises that both municipal and industrial water can be successfully recycled to mitigate demands on water resources.⁵ In addition, it recognises that effluent should be considered as a resource to be utilised either directly or indirectly, or after further treatment.⁶

There is also further potential to recycle wastewater to a variety of agricultural operations. Queensland currently recycles 2% of its municipal water to agriculture.⁷ In addition, stormwater is recognised as a resource that could be utilised for wastewater recycling applications.⁸ Stormwater is defined as all surface runoff from rainfall events in predominantly urban catchments.⁹ Such catchments may include rural or residential areas.¹⁰

Issues relevant to wastewater recycling

The following issues have been identified as major concerns for wastewater recycling:¹¹

- water quality (including impacts on groundwater and aquifers);
- potential health impacts;
- environmental (ecological, economic and social) impacts;
- the requirements for ecologically sustainable development;
- public and employee perceptions;
- lack of incentives;
- lack of information;
- the relative cost of alternative water sources;
- potential liability.

Moreover, in coastal areas the marine disposal of water is becoming increasingly unacceptable because of concerns associated with:

- contamination of bathing waters and shellfish;
- environmental and psychological concerns; and
- limits on land disposal options in coastal communities.¹²

The importance of the legal framework

Studies undertaken as part of the Water Recycling Strategy have considered some of the above issues from a scientific perspective. However, less attention has been placed on the legal framework for these issues despite the significant interrelationship between the degree of regulatory control and environmental protection.

The Water Recycling Strategy seeks to maximise the use of urban, industrial and rural effluent in Queensland in a manner that is efficient and economically and environmentally sustainable without causing adverse health effects.¹³ In order to achieve this goal, as well as obtaining significant environmental benefits from stormwater recycling, the complementary roles of science and law should be recognised. It is for science to establish whether a specific water recycling strategy is compatible with the requirements for environmental protection **and** ecological sustainability; it is for the law to ensure the appropriate degree of regulatory control based on the best available scientific evidence.¹⁴

Scope of the legislation background study

The scope of the Legislation Background Study needs to be considered within the context of the goals of the Water Recycling Strategy, as well as the Terms of Reference for the Legislation Study.

⁵ Queensland Department of Natural Resources (1998) *Queensland Wastewater Reuse Strategy*, p 2.

⁶ Queensland Department of Natural Resources (1998) *Queensland Wastewater Reuse Strategy*, p 2.

⁷ Queensland Department of Primary Industry (1999) *Agriculture Recycling Background Study*, p 1.

⁸ Queensland Department of Natural Resources (1998) *Queensland Wastewater Reuse Strategy*, p 2.

⁹ Queensland Department of Natural Resources (1998) *Queensland Wastewater Reuse Strategy*, p 2.

¹⁰ WBM Oceanics (1999) *Stormwater Recycling Background Study*.

¹¹ Kinhill (1998) *Industry Water Recycling Background Study*; WBM Oceanics (1999) *Stormwater Recycling Background Study*; Centre for Integrated Resource Management (1999) *Water Recycling Background Study*.

¹² Kinhill (1998) *Industry Water Recycling Background Study*.

¹³ Kinhill (1998) *Industry Water Recycling Background Study*.

¹⁴ Christie, E (1990) 'Environmental Legislation, Sustainable Resources Use and Scientific Terminology: Issues in Statutory Interpretation' 7 *Environmental and Planning Law Journal* 262.

Water recycling strategy goals

The aim of the Water Recycling Strategy is supported by five broad goals. Central to the Legislation Background Study is the following goal:

- Provision of a total government approach to water recycling including recommendations for legislation, policy and the provision of avenues that measure performance and monitors strategy implementation.¹⁵

A range of activities have been prescribed in order to deliver the five broad goals of the Water Recycling Strategy. In relation to the Legislation Background Study, the following activity is relevant:

- Develop best practice guidelines and procedures for the reuse of wastewater and stormwater that have a sound scientific and economic basis enabling such waters to be used in a sustainable manner without any adverse health or environmental effects and *to ensure they are capable of withstanding legal challenges should the need arise* (author's emphasis).¹⁶

It is considered that the integration of the activities with the broad goals of the Water Recycling Strategy should lead to a number of expected outcomes including:

- effluent being used in a sustainable manner without any adverse health or environmental effects; and
- guidelines and practices having a sound scientific and economic basis and capable of withstanding legal challenges should the need arise.¹⁷

Terms of reference for the Legislation Background Study

The terms of reference for the Legislative Background Study are to:

- prepare a background paper on water recycling legislation in Queensland;
- obtain an understanding of the existing legislative system in place in Queensland with respect to water recycling issues viz. statutes, regulations, policies, codes of practice and guidelines; and
- review legislation and procedures which exist elsewhere which may provide some direction for future legislation in Queensland.¹⁸

It is noted that a separate Queensland Department of Natural Resources process will cover common law issues, such as ownership of water and legal liability, and so complement the Legislation Background Study.

Background Study

The process

The Legislation Background Study has been developed in two parts:

- a review of existing Queensland legislation dealing with wastewater recycling; and
- an analysis of the effectiveness of the current regulatory regime with respect to wastewater recycling.

Review of existing legislation

A review of Queensland legislation that is relevant to wastewater recycling is set out in Appendix 1 - Review of Existing Legislation Relevant to Wastewater Recycling. The review was prepared in September 1999.

Queensland legislation which is relevant to wastewater recycling was identified using a three part process. A literature review was undertaken of publications dealing with wastewater recycling, in particular background studies prepared as part of the Water Recycling Strategy, to identify issues of relevance to the regulation of wastewater recycling. The literature review was then followed by a search of legislation databases in order to identify legislation dealing with the identified issues. Finally, a complete list of Queensland legislation was perused as a cross-check to ensure that all relevant legislation had been identified.

Each piece of identified legislation was then reviewed in terms of:

- the object of the legislation;
- the obligations imposed by the legislation (licences / permits / approvals, requirements and reporting);
- the statutory definitions that may be relevant to the regulation of recycled water and environmental protection;
- enforcement in terms of offences and penalties; and
- the investigation powers of regulatory agencies.

¹⁵ Queensland Department of Natural Resources (1998) *Queensland Wastewater Reuse Strategy*, p 2.

¹⁶ Queensland Department of Natural Resources (1998) *Queensland Wastewater Reuse Strategy*, p 3.

¹⁷ Queensland Department of Natural Resources (1998) *Queensland Wastewater Reuse Strategy*, p 4.

¹⁸ Queensland Department of Natural Resources, *Water Recycling Strategy Legislation Background Study: Terms of Reference*, 15 March 1999

Analysis of the current regulatory regime

An analysis of the current regulatory regime relevant to wastewater recycling is set out in the Legislation Background Study. The analysis was prepared in September 1999 by Dr Ted Christie and was reviewed in January 2000 following the receipt of comments from peer reviewers.

The analysis of the current regulatory regime was undertaken in two steps. Firstly each piece of legislation was reviewed in terms of the scientific issues identified in the background studies completed as part of the Water Recycling Strategy. Specifically, the scientific issues of water quality, potential health impacts, environmental impacts and ecological sustainability. Secondly, the effectiveness of the regulatory regime as a whole in addressing the identified scientific issues was considered.

A literature review was also undertaken to assist in the above analysis. Information relating to the potential revision of the identified legislation was obtained from these publications as well as from personnel communication with officers of the relevant Queensland State government departments.

One of the goals of the Water Recycling Strategy is to provide a total government approach to water recycling, including legislation and policy recommendations. Accordingly, a review of relevant publications was conducted with a view to commenting on criteria for a legal framework that would ensure valid decision-making when water quality, environmental and health effects and ecological sustainability were in issue. Such a legal framework would offset a concern, already identified, which related to potential legal challenges when recycled water is used.

All publications consulted during the course of this analysis are referenced under the heading "*References and Further Reading*" at the end of this document.

Review and analysis of the existing regulatory regime

Assessment criteria

*"The reuse of wastewater (in Queensland) is regulated by a myriad of rules and regulations exacerbated by Parliament, the Courts, the Executive, local authorities and statutory authorities."*¹⁹

*"There is a requirement in Queensland for a single water recycling document that focuses on outcomes (including environmental, social, legal) and can be employed in the establishment of any type of water recycling scheme."*²⁰

The above statements reflect two alternatives for establishing regulatory control for wastewater recycling in Queensland. That is, to either set up a new regulatory regime or alternatively, to rely on existing legislation. In assessing the appropriateness of either of these alternatives, the following objective criteria are considered to be relevant:

- Whether the use of existing legislation would provide more immediate regulatory control for wastewater recycling relative to the drafting, legislating and implementation of new legislation.
- Whether the use of existing legislation would result in more certainty for the regulatory control of wastewater recycling relative to new legislation.
- Whether new legislation could be constructed to effectively address the very broad array of uses that the Water Recycling Strategy envisages.

Accordingly, a succinct review of the legislation relevant to the regulatory control of wastewater recycling in Queensland is the basic starting point. Moreover, any such review needs to consider the extent to which each piece of legislation provides for those areas of scientific concern identified in Section "*Issues Relevant to Wastewater Recycling*" namely:

- water quality (including impacts on ground water and aquifers);
- potential health impacts;
- environmental (ecological, economic and social) impacts; and
- the requirements for ecologically sustainable development.

Any such review also needs to recognise the role imposed by legislation on the State government department that is responsible for the administration of the relevant legislation. The statutory role of the State government department administering the legislation is reflected in the object of the legislation. The statement of the object (or its legislative purpose) represents a criterion against which the validity of decision-making under the legislation is determined. That is, the object clause constrains the power granted by the legislation. Therefore, a power exercised outside the purpose clause of legislation would result in an invalid decision due to want of power.²¹

¹⁹ Wright, I et al (1998) *Wastewater: Use, Reuse and the Law in Queensland*, p 3.

²⁰ Queensland Department of Primary Industries (1999) *Agricultural Water Recycling Background Study*, p 33.

²¹ *Woollahra Municipal Council v The Minister* (1991) 23 NSWLR 710 at 725.

In this section legislation of relevance to wastewater recycling that is administered by each State government department is reviewed in terms of the scope of its statutory objects and the scope of its regulatory regime. A comprehensive summary of relevant legislation can also be found in Appendix 1 of the Legislation Background Study.

Legislation administered by the Department of Communication, Information, Local Government and Planning

Integrated Planning Act 1997

Object

The object of the *Integrated Planning Act 1997* is to seek to achieve ecological sustainability by:

- coordinating and integrating planning at the local, regional and State levels; and
- managing the process by which development occurs; and
- managing the effects of development on the environment (including managing the use of premises).²²

Comment

The *Integrated Planning Act 1997* is the principle legislation in Queensland regulating development and the effects of development. The *Integrated Planning Act 1997* is of considerable relevance to the regulation of wastewater recycling as:

- a wastewater treatment facility may be assessable development; and
- recycled wastewater may be used as part of an assessable development.

Assessable development requires either code assessment, impact assessment or both. Code assessment means the assessment of development against applicable codes (ie a code that can be reasonably identified as applying to the development). Impact assessment means the assessment of the environmental effects of the proposed development together with appropriate mitigation measures.

Environmental management requirements may be included within conditions that are imposed on the grant of a development approval or may be contained within technical codes to which development can be required to comply.

The *Integrated Planning Act 1997* has the ability to address all areas of scientific concern identified with respect to wastewater recycling, namely water quality, potential health impacts, environmental impacts and the requirements for ecological sustainable development.

Proposed amendments

It is proposed that the *Integrated Planning Act 1997* will be amended by the *Integrated Planning and Other Legislation Bill 2000*. The draft bill is not currently available as a public document.

Local Government Act 1993

Object

The objects of the *Local Government Act 1993* include the recognition of the jurisdiction of local government sufficient to allow a local government to take autonomous responsibility for the good rule and government of its area with minimum of intervention by the State government.²³

Comment

The *Local Government Act 1993* enables local governments to make local laws to control the public health and environmental risks associated with the use of recycled wastewater and thereby address identified areas of scientific concern. The *Local Government Act 1993* also allows for the Minister to make a model local law dealing with wastewater recycling for adoption by local government.

At present there are no model local laws dealing with wastewater recycling. However, in considering the effectiveness of promoting model local laws as a regulatory tool it should be noted that it is not mandatory for local governments to adopt model local laws and as such there is potential for inconsistency in regulatory regimes between local government areas.

²² *Integrated Planning Act 1997*, section 1.2.1.

²³ *Local Government Act 1993*, section 2.

Proposed amendments

There are no amendments to the *Local Government Act 1993* proposed in the near future that are relevant to wastewater recycling.

Sewerage and Water Supply Act 1949

Object

No object is specified within the *Sewerage and Water Supply Act 1949*.

Comment

The *Sewerage and Water Supply Act 1949* prohibits the discharge of a number of substances into sewerage or stormwater drains where the effect is to cause a hazard to humans or animals, a public nuisance or cause environmental contamination. The *Sewerage and Water Supply Act 1949* is relevant to wastewater recycling to the extent that it is concerned with the "front-end" issue of ensuring that the composition of sewage and stormwater is not compromised to such an extent as to affect its potential for reuse.

Proposed amendments

It is proposed to amend the *Sewerage and Water Supply Act 1949* as part of the current review of the Queensland water resources regulatory regime. The regulation of sewerage and water supply services is addressed in a draft policy paper entitled "*A Regulatory Framework for the Provision of Water Services in Queensland*" released in April 1999. An exposure Draft Bill is scheduled for release in March 2000.

It is proposed that parts of the *Sewerage and Water Supply Act 1949*, such as development approval processes, code assessments and the enforcement of offences associated with the failure to comply with such processes and codes, will be more appropriately dealt with under the *Integrated Planning Act 1997*.

Further, it is proposed that the regulation of building related activities, such as plumbing and drainage, will no longer be the responsibility of the water service providers, and as such will be regulated by the *Building Act 1975*.

Finally, it is proposed that the operational regulation of sewerage and water supply that exists under the *Standard Sewerage Law* and *Standard Water Supply Law* (for example, access, responsibilities, regulation of trade waste and other discharges into sewerage and stormwater systems) will form part of the new water industry legislation.

It is anticipated that the object of the water service section of the new regulatory framework will set out the responsibilities of water service providers to ensure that service standards and the continuity of supply of essential services are maintained.

It is intended that the definition of "water service provider" will capture any entity which, for the purpose of providing water related services:

- operates a water treatment system;
- operates a wastewater disposal or stormwater system;
- implements works to enhance ground water supply;
- operates a bulk water distribution system;
- operates a water reticulation system to retail water to customers;
- operates sewerage infrastructure;
- operates headworks to regulate a watercourse; or
- provides irrigation drainage services.

A fundamental principle of the proposed regulatory framework is that it will cover both public and private sector water service providers. Each water service provider will require a licence for their activities with the intention being that most aspects of the regulation of water service issues will be contained within the conditions attached to a water service provider's licence. It is thought that this will allow greater flexibility for the regulator in ensuring that licence responsibilities are appropriate to the particular kind of service being provided by the individual water service provider.

Standard Sewerage Law

Object

The object of the *Standard Sewerage Law* is to make provision for sewerage, sanitary conveniences and stormwater drainage.²⁴

²⁴ *Standard Sewerage Law*, section 3.

Comment

The *Standard Sewerage Law* is relevant to wastewater recycling to the extent that the connection and operation of stormwater drainage, sewerage systems used to treat sewerage, effluent systems and on-site sewerage facilities is registered to ensure compliance with appropriate standards. The *Standard Sewerage Law* however fails to address the identified areas of scientific concern.

Proposed amendments

It is proposed to amend the *Sewerage and Water Supply Act 1949* as part of the current review of Queensland's water resources policies and legislation. The regulation of sewerage and water supply services was addressed in a draft policy paper entitled "*A Regulatory Framework for the Provision of Water Services in Queensland*" released in April 1999. An exposure Draft Bill is scheduled for release in March 2000.

Standard Water Supply Law

Object

The object of the Standard Water Supply Law is to make provision for water supply.²⁵

Comment

The Standard Water Law is relevant to the regulation of wastewater recycling in that it regulates infrastructure which may be used to supply recycled wastewater for reuse. The Standard Water Law however fails to address identified areas of scientific concern.

Proposed amendments

It is proposed to amend the *Sewerage and Water Supply Act 1949* as part of the current review of Queensland's water resources policies and legislation. The regulation of sewerage and water supply services was addressed in a draft policy paper entitled "*A Regulatory Framework for the Provision of Water Services in Queensland*" released in April 1999. An exposure Draft Bill is scheduled for release in March 2000.

Legislation administered by the Health Department

Food Standards Australia New Zealand Act 1991

Object

The object of the *Food Standards Australia New Zealand Act 1991* is to consolidate and amend the law relating to the preparation and sale of food, to make provision for securing the wholesomeness and purity of and fixing standards for food and for other purposes²⁶.

Comment

The *Food Standards Australia New Zealand Act 1991* is relevant to wastewater recycling to the extent that it regulates food which is cultivated, taken or harvested from land which has been the subject of recycled water use so as to ensure that the food does not contain concentrations of substances which exceed the maximum permissible levels specified in the Food Standards Code.

The *Food Standards Australia New Zealand Act 1991* addresses the scientific concerns of the requirements of ecologically sustainable development, and the social environmental impacts of wastewater recycling, particularly potential health impacts.

Proposed amendments

The Australia and New Zealand Food Authority is currently reviewing this Act.

Health Act 1937

Object

The object of the *Health Act 1937* is to amend and consolidate the laws relating to public health.²⁷

Comment

The *Health Act 1937* is the primary piece of public health legislation in Queensland. Since public health considerations are of primary importance in relation to water recycling, it is particularly relevant to the regulation of wastewater recycling.

²⁵ *Standard Water Supply Law*, section 3.

²⁶ *Food Standards Australia New Zealand Act 1991*, Long Title.

²⁷ *Health Act 1937*, Long Title.

The *Health Act 1937* raises issues as to whether wastewater recycling could be construed as causing a nuisance or to be injurious or prejudicial to health. The sources of such adverse health impacts could arise from either biological contaminants or chemical contaminants.²⁸

The *Health Act 1937* addresses the scientific concerns of the requirements of ecologically sustainable development, and the social and environmental impacts of wastewater recycling, particularly potential health impacts. However, the *Health Act 1937* is generally considered to be outdated with the environmental health provisions dealing with specific public health risks in unnecessary detail.²⁹

Proposed amendments

It is proposed to repeal the *Health Act 1937* and replace it with a new Public Health Act. The new Public Health Act is expected to focus on the general control of public health risks, rather than enacting particular provisions to deal with particular types of public health issues.

It is proposed that provisions similar to the current nuisance provisions of the *Health Act 1937* will remain. However, the term nuisance will be changed to public health risk. It is proposed that the term public health risk will be relevantly defined to include any substance or thing, including water or soil, to which humans or animals are likely to be exposed, which is contaminated with a substance or thing which may contribute to disease in humans or have adverse effects on human health. Clearly the use of recycled wastewater has the potential to come within the scope of the proposed definition of public health risk. As is the case with the *Health Act 1937*, the proposed new Public Health Act will contain provisions which enable a person causing a public health risk to be ordered to remove the risk (Public Health Order).³⁰

It is proposed that the provisions of the *Health Act 1937* dealing with offensive trades will be omitted from the new Public Health Act as they are comprehensively dealt with by the *Workplace Health and Safety Act 1995* and the licensing regime under the *Environmental Protection Act 1994*.³¹

At this stage it is proposed that the new Public Health Act will not require the preparation of a health impact assessment as part of the development assessment process under the *Integrated Planning Act 1997*. The reason for this is to avoid the additional administrative burden which would be placed upon persons making development applications. Instead, Queensland Health is considering developing a State Planning Policy on public health to ensure that public health issues are identified and addressed in the development assessment process.

Workplace Health and Safety Act 1995

Object

The object of the *Workplace Health and Safety Act 1995* is the prevention of death, injury or illness caused by a workplace, by workplace activities or by specified high-risk plant.³²

Comment

As with the *Health Act 1937*, the *Workplace Health and Safety Act 1995* is relevant to wastewater recycling to the extent that it seeks to protect human health. The *Workplace Health and Safety Act 1995* is however, specifically concerned with the possible health impacts of wastewater recycling in the workplace. Obligations are imposed on employers and those in control of a workplace to minimise the risk of injury or illness from any plant or substance. An industry code of practice, ministerial notice or regulation is provided for as a means of managing exposure to, or protection against, such a risk.

The *Workplace Health and Safety Act 1995* addresses the scientific concerns of the requirements of ecologically sustainable development, and the social and environmental impacts of wastewater recycling, particularly potential health impacts.

Proposed amendments

There are no amendments proposed in relation to the *Workplace Health and Safety Act 1995* that are relevant to wastewater recycling.

Legislation administered by the Department of Minerals and Energy

Mineral Resources Act 1989

Object

The principal objectives of the *Mineral Resources Act 1989* are to:

- encourage and facilitate prospecting and exploring for and mining of minerals; and

²⁸ For further details on the spectrum of biological and chemical contaminants see Queensland Health Scientific Services, NRC for Environmental Toxicology and Envirotest (1999) *Wastewater Reuses Health Effects Scoping Study*.

²⁹ Queensland Health (1998) *Review of the Health Act 1937* (Public Health).

³⁰ Queensland Health (1998) *Review of the Health Act 1937* (Public Health).

³¹ Queensland Health (1998) *Review of the Health Act 1937* (Public Health).

³² *Workplace Health and Safety Act 1995*, section 7.

- enhance knowledge of the mineral resources of the State; and
- minimise land use conflicts with respect to prospecting, exploring and mining; and
- encourage environmental responsibility in prospecting, exploring and mining; and
- ensure an appropriate financial return to the State from mining; and
- provide an administrative framework to expedite and regulate prospecting and exploring for and mining of minerals; and
- encourage responsible land care management in prospecting, exploring and mining.³³

Comment

The *Mineral Resources Act 1989* is relevant to wastewater recycling as it regulates the use of recycled wastewater in relation to mining activities.

One object of this Act namely "to encourage environmental responsibility..." is achieved through the development of an Environmental Management Overview Strategy (**EMOS**). However, whilst a mining lease condition may be imposed which specifies compliance with particular codes of conduct or practice,³⁴ there could be some concern as to the degree of consistency between such a lease condition and any environmental authority under the *Environmental Protection Act 1994*.

The *Mineral Resources Act 1989* addresses the scientific concerns of the requirements of ecologically sustainable development, particularly the physical environmental impacts of wastewater recycling.

Proposed amendments

It is proposed to repeal the provisions of the *Mineral Resources Act 1989* relating to the protection of the environment. The environmental impacts of mining activities will then be regulated under the *Environmental Protection Act 1994*.

Legislation administered by the Department of Natural Resources

Forestry Act 1959

Object

The object of the *Forestry Act 1959* is to provide for forest reservations, the management, silvicultural treatment and protection of State forests, and the sale and disposal of forest products and quarry materials, the property of the crown on State forests, timber reserves and on other lands, and for other purposes.³⁵

Comment

The *Forestry Act 1959* is relevant to wastewater recycling as it regulates the introduction of damaging substances into a water body, natural water storage supply or storage facility located within a State forest or timber reserve.

The *Forestry Act 1959* addresses the scientific concerns of the requirements for ecologically sustainable development and the impacts of wastewater recycling upon the physical environment, particularly water quality. However, as the application of the *Forestry Act 1959* is geographically confined to State Forests and Timber Reserves, its use as a means of regulating wastewater recycling is particularly limited.

Proposed amendments

There are no amendments proposed in relation to the *Forestry Act 1959* that are relevant to wastewater recycling.

Water Resources Act 1989

Object

The object of the *Water Resources Act 1989* is to consolidate and amend the law relating to rights in water, the measurement and management of water, the construction, control and management of works with respect to water conservation and protection, irrigation, water supply, drainage, flood control and prevention, improvement of the flow in or changes to the courses of water courses, lakes and springs; protecting and improving the physical integrity of watercourses, lakes and springs; the safety and surveillance of referable dams; and for purposes incidental thereto and consequential thereon.³⁶

³³ *Mineral Resources Act 1989*, section 2.

³⁴ *Mineral Resources Act 1989*, section 276(4).

³⁵ *Forestry Act 1959*, Long Title.

³⁶ *Water Resources Act 1989*, Long Title.

Comment

Provisions under the *Water Resources Act 1989* reflect the paramount need to maintain, inter alia, the water quality of watercourses, lakes and water storages. In the context of the Water Recycling Strategy, watercourses, lakes and water storages would be the receiving environment and the recycled wastewater would be a potential source of contamination. The following provisions of this *Water Resources Act 1989* are especially relevant to the Water Recycling Strategy:

- The Corporation may take all steps and do all acts and things the chief executive thinks fit to protect the water resources of Queensland from anything that results in or is likely to result in a diminution of their quantity, or subject to the *Environmental Protection Act 1994*, from anything detrimental to their quality.³⁷
- For the purpose of preserving water quality, a regulation may declare an area to be a catchment area and authorise the chief executive to control a specified use of the land in a catchment area, including for example, the disposal of effluent.³⁸

The *Water Resources Act 1989* is considered to be central to addressing the key scientific concern of regulating the impacts of wastewater recycling upon the quality of water, including ground water and aquifers.

Proposed amendments

A number of significant amendments to the *Water Resources Act 1989* have been proposed as part of the current review of the legislative framework for the Queensland water industry. The review is based upon a number of modules which deal with:

- improving the water allocation and management systems in Queensland;
- planning for water development in Queensland;
- the regulatory framework for the provision of water services in Queensland;
- governance requirements for public sector water service providers; and
- other resource management issues.

An exposure draft of the *Water (Allocation and Management) Bill 2000* was released in December 1999 as a result of the review and it is expected that bills with respect to the other modules will be released in the near future.

Of particular relevance to wastewater recycling will be the Water (Infrastructure and Service Regulation) Bill. The object of the water service section of the new regulatory framework is to set out the responsibilities of water service providers to ensure service standards and continuity of supply of essential services are maintained.

It is intended that the definition of "water service provider" will capture any entity which for the purpose of providing water related services:

- operates a water treatment system;
- operates a wastewater disposal or stormwater system;
- implements works to enhance ground water supply;
- operates a bulk water distribution system;
- operates a water reticulation system to retail water to customers;
- operates sewerage infrastructure;
- operates headworks to regulate a watercourse; or
- provides irrigation drainage services.

Each water service provider will require a licence for their activities, with the intention being that most aspects of the regulation of water service issues will be contained in a water service provider's licence. It is thought that this will allow greater flexibility for the regulator in ensuring that licence responsibilities are appropriate to the particular kind of service being provided by the individual water service provider.

³⁷ *Water Resources Act 1989*, section 8(2).

³⁸ *Water Resources Act 1989*, section 27.

Legislation administered by the Department of Primary Industries

Chemical Usage (Agricultural and Veterinary) Control Act 1988

Object

The object of the *Chemical Usage (Agricultural and Veterinary) Control Act 1988* is to control the use of certain chemicals and the use of substances in or on which is the residue of certain chemicals.³⁹

Comment

The *Chemical Usage (Agricultural and Veterinary) Control Act 1988* is relevant to wastewater recycling to the extent that it regulates the use of recycled wastewater on land upon which plants are cultivated so as to ensure that the plants are not affected by residue or disease.

The *Chemical Usage (Agricultural and Veterinary) Control Act 1988* addresses the scientific concern of the requirements of ecologically sustainable development, particularly the physical and social environmental impacts of wastewater recycling.

Proposed amendments

It is intended that the *Chemical Usage (Agricultural and Veterinary) Control Act 1988* be amended. A Discussion Paper and Invitation for Public Submission was released in January 2000. It contained recommendations that the provisions of the *Chemical Usage (Agricultural and Veterinary) Control Act 1988* relating to the destruction of agricultural produce and manufactured stock food containing violative residues be retained in any future legislation.

Fisheries Act 1994

Object

The objectives of the *Fisheries Act 1994* include:

- ensuring fisheries resources are used in an ecologically sustainable way; and
- achieving the optimum community, economic and other benefits obtainable from fisheries resources; and
- ensuring access to fisheries resources is fair.⁴⁰

The *Fisheries Act 1994* is relevant to wastewater recycling to the extent that it seeks to ensure the sustainability of Queensland's fisheries. Essentially, the *Fisheries Act 1994* provides a statutory power⁴¹ to take action where a noxious substance, that is, anything harmful to fisheries resources or fish habitat or anything prescribed under a regulation or management plan, is in land, in waters, on marine plants or in a fish habitat and it appears that this substance has or may have an adverse effect on the quality or production capacity of a fishery or fish stocks or on the quality or integrity of a fish habitat. In the context of the Water Recycling Strategy, a potential contaminant contained in recycled water could trigger this statutory power.

The *Fisheries Act 1994* addresses the scientific concern of the requirements of ecologically sustainable development, particularly the physical and economic environmental impacts of wastewater recycling.

Proposed amendments

The *Fisheries Act 1994* is currently being reviewed. However it is anticipated that environmental and habitat protection will remain a key focus of the Act.⁴²

Stock Act 1915

Object

The object of the *Stock Act 1915* is to consolidate and amend the law relating to diseases in stock.⁴³

Comment

The *Stock Act 1915* is relevant to wastewater recycling to the extent that it regulates the grazing of stock on land upon which recycled wastewater has been used. It is specifically concerned with the potential adverse effects on stock and the grazed ecosystem arising from the use of recycled waters and in particular:

- animal pathogens (namely bacteria, virus, protozoa or any other agent or organism) capable of causing disease in animals; and

³⁹ *Chemical Usage (Agricultural and Veterinary) Control Act 1988*, Long Title.

⁴⁰ *Fisheries Act 1994*, section 3.

⁴¹ *Fisheries Act 1994*, section 125.

⁴² Queensland Department of Primary Industries (1999) *Review of Fisheries Act 1994 and Associated Regulations: Interim Report and Invitation for Public Submissions*.

⁴³ *Stock Act 1915*, Long Title.

- resident disease (namely a condition consisting of the presence of a chemical or antibiotic residue in the tissues of stock in excess of a particular prescribed concentration or level).

The *Stock Act 1915* addresses the scientific concern of the requirements of ecologically sustainable development, particularly the physical and economic environmental impacts of wastewater recycling.

Proposed amendments

The *Stock Act 1915* is to be reviewed in the near future with a view to being consolidated with the *Brands Act 1915* and the *Apiaries Act 1982*.⁴⁴

Legislation administered by the Department of State Development

State Development and Public Works Organisation Act 1971

Object

The object of the *State Development and Public Works Organisation Act 1971* is to provide for State planning and development through a coordinated system of public works organisation, for environmental coordination, and for related purposes.⁴⁵

Comment

The *State Development and Public Works Organisation Act 1971* is relevant to wastewater recycling to the extent that public works may be required to facilitate the Water Recycling Strategy. In considering an application for undertaking works, all State government departments, crown corporations, local governments and statutory bodies must take account of the environmental effects of the development or work and any administrative arrangements which have been published for this purpose.⁴⁶ This requirement does not apply to a significant project.⁴⁷

A project declared to be a significant project requires an environment impact statement.⁴⁸ Following the evaluation of the environmental impact statement, the Act provides the Coordinator General with power to attach conditions to projects which are subject to the approvals processes under the *Integrated Planning Act 1997* and the *Mineral Resources Act 1989*:

- where the project involves development requiring a development approval under the *Integrated Planning Act 1997*, the report to the assessment manager may state the conditions that must attach to any development approval, that the approval must be for part only of the development or that the application must be refused;⁴⁹ or
- where the project is to be regulated under the *Mineral Resources Act 1989*, the report to the Minister of Minerals and Energy may recommend the conditions that must be attached to a mining leases.⁵⁰

The *State Development and Public Works Organisation Act 1971* addresses the scientific concerns with respect to wastewater recycling in terms of the requirements of ecologically sustainable development.

Proposed amendments

There are no amendments proposed in relation to the *State Development and Public Works Organisation Act 1971* that are relevant to wastewater recycling.

Legislation administered by the Environmental Protection Agency

Beach Protection Act 1968

Object

The object of the *Beach Protection Act 1968* is to provide for the regulation of and the provision of advice in respect of certain activities affecting the coast, to minimise damage to property from erosion or encroachment by tidal water and for those purposes to establish an authority and to confer and impose upon it certain functions and powers.⁵¹

⁴⁴ Personal Communication, Wayne Dunlop, Queensland Department of Primary Industries, 18 January 2000.

⁴⁵ *State Development and Public Works Organisation Act 1971*, Long Title.

⁴⁶ *State Development and Public Works Organisation Act 1971*, section 29A(2).

⁴⁷ *State Development and Public Works Organisation Act 1971*, section 29A(3).

⁴⁸ *State Development and Public Works Organisation Act 1971*, section 29B.

⁴⁹ *State Development and Public Works Organisation Act 1971*, section 29O.

⁵⁰ *State Development and Public Works Organisation Act 1971*, section 29T.

⁵¹ *Beach Protection Act 1968*, Long Title.

Comment

A key provision of the *Beach Protection Act 1968* enables a coastal management plan to be made for a coastal management control district.⁵² Such a plan states in general terms the future preferred coastal management for land located in a coastal management control district.⁵³ Accordingly, compatibility with the coastal management plan would be essential where:

- recycled water is intended to be used in a coastal management control district; or
- a wastewater treatment facility is to be located within a coastal management control district.

The *Beach Protection Act 1968* addresses the scientific concerns with respect to wastewater recycling in terms of the requirements of ecologically sustainable development. However, the relevance of the *Beach Protection Act 1968* to the regulation of wastewater recycling is limited to the extent that its operation is confined to the management of coastal areas.

Proposed amendments

There are no amendments proposed in relation to the *Beach Protection Act 1968* that are relevant to wastewater recycling.

Coastal Protection and Management Act 1995

Object

The object of the *Coastal Protection and Management Act 1995* is to:

- provide for the protection, conservation, rehabilitation and management of the coast, including its resources and biological diversity; and
- have regard to the goal, core objectives and guiding principles of the National Strategy for Ecologically Sustainable Development in the use of the coastal zone; and
- provide, in conjunction with other legislation, a coordinated and integrated management and administrative framework for the ecologically sustainable development of the coastal zone; and
- encourage the enhancement of knowledge of coastal resources and the effect of human activities on the coastal zone.⁵⁴

Comment

The *Coastal Protection and Management Act 1995* is relevant to wastewater recycling to the extent that the Act regulates activities in coastal areas.

This *Coastal Protection and Management Act 1995* provides for the preparation of either a State coastal management plan for the coastal zone or a regional coastal management plan for parts of the coastal zones.⁵⁵ The plan may include a statement of the principles and policies by which the coastal zone is to be managed and may also deal with the use or development of land in a control district.⁵⁶

A water recycling project must necessarily be consistent with the principles and policies of a coastal management plan. A review of the object of the *Coastal Protection and Management Act 1995* illustrates the significance of environmental protection and ecologically sustainable development as underlying principles.

Proposed amendments

There are no amendments proposed in relation to the *Coastal Protection and Management Act 1995* that are relevant to wastewater recycling.

Environmental Protection Act 1994

Object

The object of the *Environmental Protection Act 1994* is to protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends (that is, ecologically sustainable development).⁵⁷

⁵² *Beach Protection Act 1968*, section 38.

⁵³ *Beach Protection Act 1968*, section 3.

⁵⁴ *Coastal Protection and Management Act 1995*, section 3.

⁵⁵ *Coastal Protection and Management Act 1995*, sections 25, 26 & 30.

⁵⁶ *Coastal Protection and Management Act 1995*, section 26.

⁵⁷ *Environmental Protection Act 1994*, section 3.

Comment

Regulatory control of environmental protection under the *Environmental Protection Act 1994* turns upon the concept of environmental harm.

Under the *Environmental Protection Act 1994*, a person must not carry out any activity that causes, or is likely to cause, any environmental harm unless the person takes all reasonable and practical measures to prevent or minimise the harm.⁵⁸ Section 38 of the *Environmental Protection Act 1994* provides for regulatory control of environmental harm by prescribing environmentally relevant activities. A person must not carry out an environmentally relevant activity without an environmental authority.

The *Environmental Protection Act 1994* provides criteria for deciding an application for an environmental authority for an environmentally relevant activity, as well as the conditions that should attach to an environmental authority. Different situations exist depending upon whether the activity is development as defined by the *Integrated Planning Act 1997*.

The *Environmental Protection Act 1994* now regulates contaminated land. An objective test for defining contaminated land is provided which linked to the primary goal of the Act, namely the regulatory control of environmental harm. This is achieved by reference to the concepts of environmental value and environmental harm.

Environmental harm is defined as any adverse, or potential adverse effect on an environmental value, and includes environmental nuisance.⁵⁹ Environmental value is defined⁶⁰ as:

- a quality or physical characteristic of the environment that is conducive to ecological health, or public amenity or safety; or
- another quality of the environment identified and declared to be an environmental value under an environmental protection policy or regulation. For example, biological integrity is defined as one such example of an environmental value in the *Environmental Protection (Water) Policy 1997*.⁶¹

The *Environmental Protection Act 1994* does not however, provide any definitions for ecological health, public amenity or safety, notwithstanding they are the essential foundations for regulatory control of environmental harm.

The *Environmental Protection Act 1994* has wide reaching application to the regulation of wastewater recycling and clearly has the ability to address scientific concerns associated with wastewater recycling, namely ecologically sustainable development, environmental impacts, potential health impacts and water quality. However, in order to rely on the *Environmental Protection Act 1994* to regulate wastewater recycling, it is essential that acceptable meanings of scientific terms and concepts be specified.

Proposed amendments

There are no amendments proposed in relation to the *Environmental Protection Act 1994* that are relevant to wastewater recycling.

Marine Parks Act 1982

Object

The object of the *Marine Parks Act 1982* is to provide for the setting apart of tidal lands and tidal waters as marine parks and for related purposes.⁶²

Comment

The *Marine Parks Act 1982* is relevant to wastewater recycling to the extent that it regulates all activities in Queensland marine parks.

The key issue is whether recycled water would be discharged into a marine park as a permit is required for acts which may cause a direct and substantial alteration to the physico-chemical environment of the marine park (ie the sensitivity of the receiving environment of the marine park is the paramount consideration).⁶³

In addition, consideration should be given as to whether recycled wastewater would be construed as falling within the term "waste" as a permit is required to discharge or deposit household, industrial, commercial or any other waste in a marine park.⁶⁴

⁵⁸ *Environmental Protection Act 1994*, section 36 (General Environmental Duty).

⁵⁹ *Environmental Protection Act 1994*, section 14.

⁶⁰ *Environmental Protection Act 1994*, sections 9(a) and 9(b).

⁶¹ *Environmental Protection Act 1994*, section 7(2)(a).

⁶² *Marine Parks Act*, Long Title.

⁶³ *Marine Parks Regulation*, section 19.

⁶⁴ *Marine Parks Regulation*, section 20.

It should be noted that a zoning plan may prohibit or regulate an act that may be done by a public authority except, inter alia, in accordance with the provisions of the zoning plan.⁶⁵ A zoning plan is subordinate legislation under the *Marine Parks Act 1982*. For example, see the *Marine Parks (Moreton Bay) Zoning Plan 1997*. The object of the Moreton Bay zoning plan is wholly ecocentric and completely mirrors the object of the *Nature Conservation Act 1992*. Ecologically sustainable development is not a consideration of the object of the *Marine Parks Act 1982*, the *Marine Parks (Moreton Bay) Zoning Plan 1997* or the *Nature Conservation Act 1992*.

Proposed amendments

There are no amendments to the *Marine Parks Act 1982* proposed in the near future that are relevant to wastewater recycling.

Nature Conservation Act 1992

Object

The object of the *Nature Conservation Act 1992* is the conservation of nature.⁶⁶

Comment

The conservation of nature is achieved by an integrated and comprehensive management strategy that involves, inter alia, the management of protected areas.⁶⁷ A protected area is defined to mean a national park, conservation park, resources reserve, nature refuge, coordinated conservation area, wilderness area, World Heritage management area or international agreement area.

Under the *Nature Conservation Act 1992*, lakes or watercourses in a protected area must not be polluted, nor must a water supply or water storage facility in a protected area be interfered with. Accordingly, the environment of these receiving waters in a protected area must not be adversely affected by recycled wastewater.

The *Nature Conservation Act 1992* addresses the scientific concern of the requirements of ecologically sustainable development, particularly impacts on the physical environment. However, the relevance of the Act to the regulation of wastewater recycling is geographically limited to protected areas.

Summary

The assessment of the legislation that has been identified as being relevant to wastewater recycling clearly indicates that the current regulatory regime is fragmented and reliant upon a myriad of different statutes administered by different State government departments. The point at issue is whether this regime nevertheless provides an effective framework for the regulation of wastewater recycling, or alternatively, whether new legislation is required.

The effectiveness of the current regulatory regime has been assessed with reference to the scientific concerns associated with the broad array of proposed uses for recycled water, as identified in the background studies prepared as part of the Water Recycling Strategy. These specifically include:

- water quality (including impacts on ground water and aquifers);
- potential health impacts;
- environmental (ecological, economic and social) impacts; and
- the requirements for ecologically sustainable development.

Each of the scientific concerns identified is comprehensively addressed by at least one of the pieces of legislation considered. As such, it is concluded that the current regime is indeed effective in meeting these scientific concerns. Accordingly, it is recommended that a new water recycling legislation is not warranted.

This recommendation is supported by the objective criteria set out in Section 4.1 (Assessment Criteria) for assessing the two alternatives of relying on existing regulatory regime with respect to wastewater recycling, or setting up a new regime. Those assessment criteria were stated as follows:

- Whether the use of existing legislation would provide more immediate regulatory control for water recycling relative to the drafting, legislating and implementation of a new legislation.
- Whether the use of existing legislation would result in more certainty for regulatory control for water recycling relative to new legislation.
- Whether new legislation could be constructed to effectively address the very broad array of uses that the Water Recycling Strategy envisages.

⁶⁵ *Marine Parks Regulation*, section 20.

⁶⁶ *Nature Conservation Act 1992*, section 4.

⁶⁷ *Nature Conservation Act 1992*, section 5(c).

In this case, existing legislation is able to provide certainty and immediate regulatory control for water recycling with one qualification, namely that the key issues which address the requirements for the scientific and legal standards are integrated.

Furthermore, it is anticipated that new legislation that could effectively address the broad array, of issues encompassed by wastewater recycling would be very challenging to draft. This has certainly been the experience in the United States with the regulatory control of biotechnology.⁶⁸ The United States approach for regulating and using products of biotechnology in agriculture has been to use existing laws and established regulatory agencies to provide oversight. The rationale for this approach in the United States is to recognise that products generated through biotechnology cover a wide spectrum of uses.

Given the above recommendation, the next question is whether the appropriate degree of regulatory control for water recycling could most effectively be achieved by incorporating the Water Recycling Strategy into one piece of legislation, administered by one State government department, or alternatively, some form of integrated decision-making involving a number of existing pieces of legislation and different State government departments. It is considered that the first alternative is the most effective approach due to the resulting certainty in decision-making. In addition, problems of inconsistency between conditions which could be imposed by different State government departments under different pieces of legislation, including the legislative power permitted under different objects, would be avoided.

Considerations for a future regulatory framework: The role of policies, guidelines and codes of practice

The role of policies and guidelines in a regulatory regime

In meeting the goal of the Water Recycling Strategy to provide a total government approach to wastewater recycling, it is necessary to be cognisant of the role of policies, guidelines and codes of practice in a regulatory regime. Specifically, an understanding of administrative law principles is required in order to appreciate the weight which can be attached to a policy, guideline or code of practice in terms of regulatory control.

Policies, whether described as guidelines, principles or in some other way, are non-statutory rules and as such are for general guidance only.⁶⁹ A policy is not binding on the government, other persons or the Courts.⁷⁰

However, policies and guidelines can facilitate the integrity of the administrative decision-making. It is therefore considered to be both lawful and desirable that administrators formulate policies and guidelines structuring their broad discretionary powers.⁷¹

To achieve this goal, certain requirements have been recognised in law. These requirements are embodied in the observations made by Brennan J (as he then was) in *Re Drake and Minister for Immigration and Ethnic Affairs (No. 2)*:⁷²

"There are powerful considerations in favour of a Minister adopting a guideline policy. It can serve to focus attention on the purpose which the exercise of the discretion is calculated to achieve, and thereby to assist the Minister and others to see more clearly, in each case, the desirability of exercising the power in one way or another. Decision-making is facilitated by the guidance given by an adopted policy, and the integrity of decision-making in particular cases is the better assured if decisions can be tested against such a policy. By diminishing the importance of individual predilection, an adopted policy can diminish the inconsistencies which might otherwise appear in a series of decisions, and enhance the sense of satisfaction with the fairness and continuity of the administrative process."

and

"A policy must be consistent with the statute. It must allow the Minister to take into account the relevant circumstances, it must not require him to take into account irrelevant circumstances, and it must not serve a purpose foreign to the purposes for which the discretionary power was created. A policy which contravenes these criteria would be inconsistent with the statute. Also, it would be inconsistent with ss 12 and 13 of the Migration Act if the Minister's policy sought to preclude consideration of relevant arguments running counter to an adopted policy which might be reasonably advanced in particular cases. His discretion cannot be so truncated by a policy as to preclude consideration of the merits of specified classes of cases. A fetter of that kind would be objectionable, even though it were adopted by the Minister on his own initiative. That is not to deny the lawfulness of adopting an appropriate policy which guides but does not control the making of decisions, a policy which is informative of the standards and values which the Minister usually applies. There is distinction between an unlawful policy which creates a fetter purporting

⁶⁸ Milewski, E (1998) Existing Laws Ensure Safe Use 15 *Environ Forum* 55.

⁶⁹ *Vadale Pty Ltd v Landsborough Shire Council* (1985) QPLR 338.

⁷⁰ *Fowler v Brisbane City Council* (1969) 20 LGRA 523.

⁷¹ *British Oxygen Co Ltd v Minister for Technology* [1971] AC 625.

⁷² (1979) 2 ALD 634 at 640, 641.

to limit the range of discretion conferred by a statute, and a lawful policy which leaves the range of discretion intact while guiding the exercise of the power."

The "Drake test" identifies a number of criteria which must be present in a policy for it to facilitate the integrity of the administrative decision-making process:

- the need for the policy to be consistent with the statute and any subordinate legislation;
- the need for the policy to take into account relevant, not irrelevant, considerations; and
- the policy should not be used for a purpose beyond the discretionary power for which it was created.

It should be noted that there is a distinction between policies and guidelines made or settled at a ministerial (or political) level and those made or settled at a departmental level⁷³ in terms of the respective weight attributed to each. That is, the weight attributed to a ministerial policy or guideline is greater than that attributed to a policy or guideline settled at departmental level.⁷⁴ However, the administrative decision-maker should as far as possible give effect to the departmental policy or guidelines unless there are very good reasons why it should be varied in a particular case.⁷⁵ Clearly, adherence to the judicial statement in Drake's case is one such reason.

The role of codes of practice in a regulatory regime⁷⁶

The status of codes of practice has been succinctly summarised as follows:

*"Although it is accepted that the Codes [of Practice] should be regarded as an integral part of legislation, it is said judicially that they form no principles of law and only provide what are standards of good practice and behaviour."*⁷⁷

Codes of practice are however increasingly being used as a means of achieving regulatory control in the sphere of environmental protection. For example, under the *Environmental Protection Act 1994*, compliance by an industry with its specific code of practice may provide a defence to a charge of unlawful environmental harm, a criminal offence under the *Environmental Protection Act 1994*.⁷⁸ By way of contrast, under New South Wales' *Environmental Offences and Penalties Act 1989* compliance with a code of practice does not necessarily act as a defence to causing unlawful environmental harm. In a pollution incident decided by the Land and Environment Court of New South Wales⁷⁹ it was held that obligations under the *Environmental Offences and Penalties Act 1989* (NSW) did not rest on industry codes. Rather, Ampol had a general obligation to avoid, or to minimise, environmental harm which might arise out of, or be connected with, their depot. Ampol had an obligation to prevent environmental harm through the escape of petroleum products.⁸⁰

Clearly then, two models exist for the use of codes of practice in the context of wastewater recycling regulation:

- Firstly, a code of practice may act as a defence to causing unlawful environmental harm. In this case liability would be excluded if the use of recycled wastewater is carried out in accordance with the code of practice. An analogous approach to this would be to provide for a specific approvals process for wastewater reuse schemes, which if approved and operated in accordance with the approval, would remove any liability.
- Secondly, a code of practice may represent a relevant consideration as a defence to causing unlawful environmental harm which the court has discretion to apply in its decision-making process. The relevant legislation would simply have to provide for the court "to have regard to"⁸¹ the relevant code of practice as a defence to a charge of unlawfully causing unlawful environmental harm.

In any analysis of the alternative models, it is important to recognise that decisions of the court need to be consistent with both the legal and scientific standards for proof. For environmental crimes (for example, unlawful environmental harm) the onus on the prosecution to prove its case beyond reasonable doubt approximates the scientific standard for causality namely the 95%, sometimes 99%, confidence level.⁸²

⁷³ *Re Becker and Minister for Immigration and Ethnic Affairs* (1977) 1 ALD 158.

⁷⁴ *Re Aston and Secretary, Department of Primary Industries* (1985) 8 ALD 366.

⁷⁵ *Re Pigdon & Anor and Minister for Veterans' Affairs* (1989-1990) 19 ALD 658.

⁷⁶ This section is based on the following manuscript: Christie, E. (1999) 'Ecologically Sustainable Development, Codes of Practice and Legal Decision-making' in, Hale, P. et al (eds) *Management of Sustainable Ecosystems*, The Centre of Conservation Biology, University of Queensland (in press).

⁷⁷ Lord Campbell of Alloway (1986) *Codes of Practice and Legislation*.

⁷⁸ Vincent, M. (1996) 'Environmental Protection Act: Miscellaneous', in Fisher, D & Walton, M (eds) *Environmental Law*.

⁷⁹ *Environmental Protection Authority v Ampol Ltd* (1994) 82 LGERA 247.

⁸⁰ Johnson, J. (1995) 'Environmental Responsibility' 3 *Law Society Journal* 58.

⁸¹ The phrase "to have regard to" was considered by the High Court of Australia in *R. v Toohey and Another Ex parte Meneling Station Pty Ltd and Other* (1982) 158 CLR 327 where at 353 Gibbs CJ stated: "When the section directs the Commissioner to "have regard to..." it requires him to take those matters into account and to give weight to them as a fundamental element in making his recommendation."

⁸² Ashford, E. (1983) 'Examining the Role of Science in the Regulatory Approach' 25 *Environ* 7.

For a code of practice to act as a legal defence for causing unlawful environmental harm, and to be consistent with the legal and scientific standard, it is argued that the following preconditions would need to be addressed:

- Whether the code of practice could specify threshold values or indicators for water quality. In addition, whether the code of practice could define the meaning of key scientific terms and concepts for recycled water, with such particularity, that there would be no uncertainty attached to their meaning or application. In regard to threshold values or indicators for water quality, it is relevant to note that, contrary to a long held misconception, science does not generate exact knowledge with logical certainty.⁸³
- Whether the meaning provided in the code for key scientific terms and concepts for recycled water was clear and intelligible to regulators, land owners, resource users and the Courts so as to ensure consistent decision-making.
- Whether sufficient data or information was available to objectively assess the specified indicators for environmental protection. That is, whether decisions could be made free of subjectivity.

Clearly, these are significant issues that need to be resolved by science in order to determine the appropriate direction to achieve regulatory control of recycled water use. Where these preconditions cannot be met, then consideration should be given to providing our Courts with the discretion to determine the weight given to any particular industry code of practice as a defence to causing unlawful environmental harm.

Considerations for a future regulatory regime: Possible scientific approaches to regulatory control

Threshold standards

The objective of environmental regulation is to adequately protect, in a broad sense, the environment for humans. Threshold standards for a pollutant are frequently specified as the means for achieving this objective. Some general concepts for the use of threshold standards for achieving regulatory control are evident:⁸⁴

- Standards must be based on scientific facts, realistically derived and not on political feasibility, expediency, emotion of the moment, or unsupported information.
- All standards, guides and threshold limits relied upon must be completely documented - including the criteria on which they are based.
- The establishment of unnecessarily severe standards must be avoided.
- Realistic levels must be determined. However, because of the infinite variations of biological and chemical reactions to environmental change, regulations should provide for some flexibility for adjustment to a particular situation.

Notwithstanding the significance of the above concepts, it may well be difficult to transform them easily into regulatory control language. Accordingly, some understanding of the differing approaches in setting standards for regulatory control is essential. A number of approaches could be used to ensure water would be of a quality to support the designated use. Common approaches used to protect environmental values focus on either technology-based controls or simple (chemical) water quality standards.⁸⁵

Uniform effluent standards approach

Uniform effluent standards are usually set to limit pollutant concentrations in an effluent, through the use of the best available technology not entailing excessive cost. That is, cost effective technology is available to treat sewage effluent to meet the general standard.

Advantages of the uniform effluent standards approach

This approach has the advantages that:

- it is simple and comprehensible to apply;
- in a regulatory context, it is decisive, legally defensible and enforceable as it provides clear standards for establishing water quality impacts; and
- frequent revision of standards reflect the ability of the best pollution abatement technology to be effective in reducing pollution from point sources.

⁸³ Black, B. (1988) 'A Unified Theory of Scientific Evidence' 80 *Columbia Law Review* 595.

⁸⁴ Mackerthum, K. (1982) 'Environment Controls: Are they Swords of Damocles?' 54 *Journal of Water Pollution Control Federation* 1061.

⁸⁵ Fuggle, R & Rabie M (eds) (1994) *Environmental Management in South Africa*; Mount, D. (1985) 'Scientific Problems in Using Multispecies Toxicity Testing for Regulatory Purposes' in Cairns, J. (ed) *Multispecies Toxicity Testing*.

Disadvantages of the uniform effluent standards approach

This approach has the disadvantages that:

- The focus is on effluent. The impacts of effluent discharges on water quality in receiving waters is largely ignored.
- The approach may fail to protect the quality of water resources in circumstances where there are background concentrations of a particular pollutant arising from diffuse sources - or there are multiple sources of the pollutant.
- It may not necessarily be cost effective because of the reliance on all effluent to comply with the same standards as well as being independent of variations in the sensitivity of the receiving environment or in the costs involved.
- No incentive is provided for industry to locate at the most advantageous environmental location.
- Chemical standards may not have any meaning outside the legal/regulatory context and, as such, protect only those environmental values included in the standard-setting process.
- Toxicity-based criteria may not be adequate as early warning devices for the detection of degradation.
- Since the 1970s, United States experience with the use of ambient-based standards as a means for achieving regulatory control of environmental values reveals some of the constraints in the logic of this approach. Science cannot necessarily deliver the specificity, with the appropriate mathematical certainty as to what thresholds (or acceptable concentrations) are safe for all organisms in terms of reproductive, sub-lethal and long-term effects. This problem is exacerbated when compounds mix, like cocktails, in receiving waters. Any chemical transformations that occur, at best, are poorly understood. Furthermore, the synergistic action of small concentrations of chemicals is not well understood.⁸⁶
- Poorly understood but important biological mechanisms and effects may not be incorporated into the standard-setting process.

Receiving water quality objectives approach

This is an approach to water pollution control linked to some assessment of the quality and/or sensitivity of the receiving waters. The approach is based on the principle that receiving waters have an inherent capacity to assimilate pollutants, without adverse impacts, for accepted uses of the waters concerned. In the context of the Water Recycling Strategy, this principle could be extended to include the sensitivity of the environment where recycled water is applied.

The application of this approach, in the context of the Water Recycling Strategy, would require the following issues to be addressed:

- Defining the suitable uses for a water body or the receiving environment.
- On the basis of these uses, specifying the concentrations of monitoring variables, in the recycled water resource, which must not be exceeded. These concentrations can also be based on the result of a waste load allocation. In this case monitoring variables refer to the set of all variables which may have an effect on water quality.
- Controlling pollution from point sources by setting site-specific effluent standards which address the contribution of diffuse sources and the principle of the receiving water quality objective.

Advantages of the receiving water quality objectives approach

This approach has the advantages that:

- Both point and diffuse sources of pollution are considered. The approach depends on managing the quality of receiving waters/environment in such a way that there is a minimum interference with the lawful uses of those waters/environment.
- It is cost effective. The assessment of the assimilative capacity of receiving waters/environment for particular pollutants results in the level of control required for adequate environmental protection to be minimised.
- Incentives are provided to industry to locate where receiving waters are less sensitive to pollution.

Disadvantages of the receiving water quality objectives approach

This approach has the disadvantages that:

- From a regulatory control viewpoint, the approach is more technologically demanding as it requires an assessment of the fate/pathways of pollutants in the water environment as well as their impacts of recycled water in the receiving environment.

⁸⁶ Christie, E. (1999) *Environmental Law: Contemporary Challenges for Science and Law*.

- The approach depends on site-specific effluent standards so that it is not as straight forward to apply as a uniform effluent standard.

Pollution prevention approach

This approach recognises that some pollutants are hazardous or dangerous because of their toxicity, persistence and their capacity to bio-accumulate. Accordingly, this approach focuses on minimising or preventing their impact to the water environment. In this regard, the receiving water quality objective approach to managing such pollutants is considered to be inappropriate.

However, the pollution prevention approach highlights the need to identify substances that are toxic, persistent and have the capacity to bio-accumulate eg the model used by the Department of Environment (UK).⁸⁷

Biological criteria

Biological criteria are a significant means for assessing disturbances arising from human activities. Background papers produced as part of the Water Recycling Strategy have indicated that monitoring variables for recycled waters should not be solely restricted to chemical indicators. Biological criteria "*directly measure the condition of the resource at risk, detect problems that other methods may miss or underestimate, and provide a systematic process for measuring progress resulting from the implementation of water quality programs*".⁸⁸ In this regard, it needs to be recognised that:

- biological criteria do not replace chemical and toxicological methods but increase the probability that an assessment program will detect degradation arising from human activities; and
- biological criteria can be used to assess the condition of the water resource with the goal of protecting human health, biological integrity or a specific resource.

In terms of biological criteria, indicators that could be considered, with respect to the use of recycled water, include bioassay single and multispecies tests, bioassay and ecosystem structure, function and resilience.

Recommendations

A new lead statute

It has been recommended that the most effective means by which wastewater recycling may be regulated is the nomination of a single piece of legislation to take the lead role in the regulatory regime. It is considered that this may be achieved by prescribing the water recycling activities proposed as part of the Water Recycling Strategy as environmentally relevant activities under the *Environmental Protection Act 1994*.

The meaning of environment for the purposes of the *Environmental Protection Act 1994* is very broad and should encompass the scientific concerns associated with water recycling addressed by existing legislation in Queensland. The *Environmental Protection Act 1994* defines environment to include:

- (a) ecosystems and their constituent parts including people and communities; and
- (b) all natural and physical resources; and
- (c) those qualities and characteristics of locations, places and areas, however large or small, that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community; and
- (d) the social, economic, aesthetic and cultural conditions affecting the matters in paragraphs (a), (b) and (c) or affected by those matters.⁸⁹

The *Environmental Protection Act 1994* would achieve regulatory control of water recycling through its focus on environmental harm. Some understanding of the key offences for environmental harm is therefore essential. In decreasing order of significance these offences are:

- serious environmental harm⁹⁰;
- material environmental harm⁹¹; and
- environmental nuisance.⁹²

⁸⁷ Agg, A & Zabel T (1990) 'Red-list Substances: Selection and Monitoring' 4 *Journal of the Institute of Water and Environmental Management* 44.

⁸⁸ Environmental Protection Agency USA, 1990.

⁸⁹ *Environmental Protection Act 1994*, schedule 9.

⁹⁰ *Environmental Protection Act 1994*, section 17.

⁹¹ *Environmental Protection Act 1994*, section 16.

⁹² *Environmental Protection Act 1994*, section 15.

The primary benefits of regulating water recycling in Queensland by reliance on the environmentally relevant activity provisions of the *Environmental Protection Act 1994* can be summarised as follows:

- Regulatory control of environmental harm is the basis of the *Environmental Protection Act 1994* through its focus on environmental value. Environmental value is a broad scientific concept and its statutory meaning could be construed to address scientific concerns identified with the use of recycled water.
- The *Environmental Protection (Water) Policy 1997* extends the potential scope of regulatory control for water recycling by enabling the identification and statutory provision for additional environmental values which would be essential to the Water Recycling Strategy.
- An application for an environmental authority for an environmentally relevant activity under the *Environmental Protection Act 1994* is evaluated with respect to objective criteria (being the "Standard Criteria"). Consistency and certainty in decision-making can thereby be achieved.
- Depending on the nature of the activity, there is flexibility to assign a water recycling activity as a level 1 or level 2 environmentally relevant activity, with different statutory requirements for licensing applications and the approval process.
- Level 1 environmentally relevant activities also require the administering authority to grant the application only if it is satisfied that the risk of environmental harm from the activity is insignificant because of:
 - any applicable cleaner production techniques used by the licensee; and
 - any applicable waste minimisation practices used by the licensee; and
 - contingency plans the licensee has developed to manage abnormal or emergency situations that may arise in carrying out the activity; and
 - the licensee's implementation of best practice environmental management techniques has resulted in levels of environmental protection over and above the levels required by the conditions of the licence; and
 - the licensee's compliance with the general environmental duty.⁹³
- Compliance with the general environmental duty⁹⁴ is relevant in relation to defending any charge relating to causing unlawful environmental harm.⁹⁵ In deciding what are reasonable and practicable measures in order to comply with the general environmental duty, consideration is given to factors such as:
 - the nature of the harm or potential harm; and
 - the sensitivity of the receiving environment; and
 - the current state of technical knowledge for the activity; and
 - the likelihood of successful application of the different measures that might be taken; and
 - the financial implications of the different measures as they would relate to the type of activity.⁹⁶

Clearly, there is a link between the environmental value of ecological health, the Standard Criteria and reasonable and practicable measures for the general environmental duty which operates synergistically to achieve the objectives for environmental protection and management associated with the use of recycled water.

- Environmentally relevant activities under the *Environmental Protection Act 1994* interact with the *Integrated Planning Act 1997*. The *Environmental Protection Act 1994* provides for environmental approvals for environmentally relevant activities which require developmental approval under the *Integrated Planning Act 1997* and those that do not.
- Additional safeguards for water recycling and the regulatory control of environmental harm exist in that contaminated land processes are part of the *Environmental Protection Act 1994*. Should a contaminated land problem arise through the use of recycled water, the *Environmental Protection Act 1994* facilitates its resolution through its provisions for a site management report, environmental management and contaminated land registers, site management plan and remediation.
- Considerable flexibility and innovativeness exists within the *Environmental Protection Act 1994* to ensure compliance with an environmental authority other than by a criminal prosecution, for example, environmental management programs,⁹⁷ environmental protection orders⁹⁸ and restraint orders.⁹⁹

⁹³ See *Environmental Protection Act 1994*, section 44(2).

⁹⁴ See *Environmental Protection Act 1994*, section 36.

⁹⁵ See *Environmental Protection Act 1994*, section 119.

⁹⁶ See *Environmental Protection Act 1994*, section 36(2).

⁹⁷ See *Environmental Protection Act 1994*, section 80.

⁹⁸ See *Environmental Protection Act 1994* section 109.

⁹⁹ See *Environmental Protection Act 1994* section 194.

- Very broad enforcement and investigation powers are provided to ensure regulatory control of environmental harm associated with recycled water use activities where an environmental authority for either a level 1 or level 2 environmentally relevant activity has been granted.

Issues for consideration: Key scientific definitions

It is a general rule of statutory construction that technical terms used in a statute should receive their technical meaning unless it is clear from the context, or the subject matter, that the legislation has used the terms in a popular or more enlarged sense.¹⁰⁰ As such, poorly drafted definitions for scientific terms or concepts, or even the absence of any definitions, can only lead to constraints in the regulatory control of water recycling and problems for decision-making.

Therefore, in order to rely on the *Environmental Protection Act 1994* for regulatory control of wastewater recycling, acceptable statutory meanings of scientific terms and concepts is crucial. Specifically, the linchpin for regulatory control of environmental harm is the meaning of environmental value, namely ecological health, public amenity and safety.

Whilst the meaning of the terms amenity and safety have been considered judicially, the *Environmental Protection Act 1994* provides no assistance to the meaning of the scientific concept, ecological health. To some extent this is surprising, given its usage by the scientific community for almost a decade. To this end, it is considered that high priority should be given to the use of a structured alternative dispute resolution process, for example, the scientific round-table,¹⁰¹ to arrive at definitions for key scientific terms such as:

- ecological health;
- amenity; and
- public safety.

The purpose of the scientific round-table would be to arrive at the meaning of these scientific terms and concepts that could then be incorporated into the statute or delegated legislation, policy or code of practice for water recycling. Meanings of scientific terms and concepts, so derived, would need to be in accordance with the scientific standard. Furthermore, a scientific round-table or regulatory negotiation should also consider:

- Whether there are any other environmental values which need to be included in the *Environmental Protection (Water) Policy 1997* to ensure all scientific concerns identified in existing statutes have been addressed, for example, environmental risk and health impacts as part of the meaning of public safety.
- Whether the following definition for "*biological integrity*" in the water policy is appropriate for water recycling and regulatory decision-making:

"*Biological integrity*" of a water means the water's ability to support and maintain a balanced, integrative adaptive community of organisms having a species composition, diversity and functional organisation comparable to that of the natural habitat of the locality in which the water is situated.¹⁰²

Issues for consideration: A code of practice

It is anticipated that a code of practice would be an integral part of the regulation of wastewater recycling in Queensland. Codes of practice are viewed as more effective for achieving the object of environmental protection legislation than other tools such as prosecutions as they are seen as preventative. For example, a code of practice may mean that environmental harm does not occur. In contrast, a prosecution is a reaction to environmental harm that has occurred.¹⁰³

The effectiveness of any code of practice will depend on the certainty for legal decision-making provided by the scientific content of the code. The scientific content of the code needs to have resolved any divergent scientific viewpoints related to:

- the meaning of key scientific terms and concepts; and
- threshold values or indicators for water quality.

¹⁰⁰ See Griffith CJ in *Davies v Western Australia* (1904) 2 CLR 29.

¹⁰¹ A scientific round-table is conducted using an appropriate alternative dispute resolution process agreed to by the round-table participants. For example, Independent Expert Appraisal is a process wherein a facilitator drawing on information provided by the participants, together with additional research undertaken by the facilitator, makes findings or conclusions on issues where divergent opinions exist. However, the facilitator's findings or conclusions are a non-binding opinion and paves the way for further negotiations for reaching agreement at the round-table. Representation at the scientific round-table would be restricted to participants having scientific expertise in the issue(s) and a facilitator. The facilitator should be familiar with the subject matter and scientific issues associated with the conflict as well as alternative dispute resolution processes.

¹⁰² *Environmental Protection (Water) Policy 1997*, schedule 2.

¹⁰³ Vincent, M. (1996) 'Environmental Protection Act: Miscellaneous' in Fisher, D & Walton, M (eds) *Environmental Law*.

The meaning of key scientific terms and concepts

If a code of practice cannot particularise the meaning of key terms for environmental protection so as to avoid any uncertainty associated with its application, regulatory decision-making is placed in jeopardy. Not only could environmental harm still occur, but the offender may also rely on compliance with a poorly drafted definition contained in a code as a defence to avoid prosecution.

Threshold values or indicators for water quality

A significant feature of the Water Recycling Strategy is an assessment of the impacts of the recycled water on the environment to which it is applied. Accordingly, the sensitivity of the receiving environment is central to all water recycling activities. Moreover, the receiving environment may be terrestrial, aquatic or marine, each environment having a differential capacity with respect to resilience and hence, "ecological health". It is concluded that any attempt to rely on uniform standards, rather than site specific standards based on the sensitivity of the receiving environment, will lead to significant constraints for environmental management and protection, where water recycling is in issue.

Based on the critique of possible scientific approaches to regulatory control in Section 6 of the Legislation Background Study, it is considered that the Receiving Water Quality Objectives Approach should be the preferred model for the Water Recycling Strategy.

Further considerations

The recommendation of this Report that wastewater recycling is most appropriately regulated under the *Environmental Protection Act 1994* is based upon a review of existing Queensland legislation. It is however noted that the current review of Queensland water industry legislation may produce new legislation which may provide an alternative regulatory regime to that which is currently provided by the *Environmental Protection Act 1994*.

Whilst the proposed Water (Infrastructure and Service Regulation) Bill has not been released, the draft policy papers released by the Department of Natural Resources as part of the review of Queensland's water industry legislation indicates that a personal licensing regime will be established within that legislation. There is no reason why a personal licensing regime could not be established in respect of the operation of wastewater reuse schemes provided that the legislation is structured to address the scientific and legal concerns identified in this Report and other background studies produced as part of the Water Recycling Strategy.

References and further reading

- Agg, A. & Zabel, T. (1990) 'Red-list Substances: Selection and Monitoring' 4 *Journal of the Institute of Water and Environmental Management* 44.
- Ashford, E. (1983) 'Examining the Role of Science in the Regulatory Approach' 25 *Environ* 7.
- Black, B. (1988) 'A Unified Theory of Scientific Evidence' 80 *Columbia Law Review* 595.
- Campbell (of Alloway), Lord (1986) *Codes of Practice and Legislation*, House of Lords Parliamentary Debates, volume 468, 15 January 1986 at column 1077.
- Centre for Integrated Resource Management (1999) *Water Recycling Background Study*.
- Christie, E. (1999) *Environmental Law: Contemporary Challenges for Science and Law*, CSIRO Wildlife and Ecology Divisional Scientists' Conference, Wagga, 9-12 February 1999.
- Christie, E. (1999) *The Potential Role for Negotiated Rulemaking in Queensland's Environmental Protection Agency*, QELA Seminar on Negotiated Rulemaking, Brisbane, February 1999.
- Christie, E. (1998) *Scientific Evidence and Prosecutions under the Environmental Protection Act 1994 (Qld)*, LAAMS Seminar, Brisbane, February 1998.
- Christie, E. (1990) 'Environmental Legislation, Sustainable Resource Use and Scientific Terminology: Issues in Statutory Interpretation' 7 *Environmental and Planning Law Journal* 262.
- Denning, Lord (1986) *Codes of Practice and Legislation*, House of Lords Parliamentary Debates, volume 468, 15 January 1986 at column 1079.
- Fuggle, R & Rabie, M (eds.) (1994) *Environmental Management in South Africa*, Juta & Co Ltd, Capetown.
- Johnson, J. (1995) 'Environmental Responsibility' 3 *Law Society Journal* 58.
- Kinhill (1998) *Industry Water Recycling Background Study*.
- Mackerthum, K. (1982) 'Environment Controls: Are they Swords of Damocles?' 54 *Journal of Water Pollution Control Federation* 1061.
- Milewski, E. (1988) 'Existing Laws Ensure Safe Use' 15 *Environ Forum* 55.
- Mount, D. (1985) 'Scientific Problems in Using Multispecies Toxicity Testing for Regulatory Purposes' in Cairns, J. (ed.) *Multispecies Toxicity Testing*, Permagon, New York.
- Nicholls, D. (1998) *Contaminated Lands Seminar*, QELA Brisbane, 9 February 1998.

- Pritzker, D. (1995) 'Regulation by Consensus: Negotiated Rulemaking in the United States' 1 *Commercial Dispute Resolution* 217.
- Queensland Department of Natural Resources (1998) *Queensland Wastewater Reuse Strategy*.
- Queensland Department of Primary Industries (2000) *Review of the Agricultural Chemicals Distribution Control Act 1966 & Chemical Usage (Agricultural and Veterinary) Control Act 1988: Discussion Paper and Invitation for Public Submissions*.
- Queensland Department of Primary Industries (1999) *Agriculture Water Recycling Background Study*.
- Queensland Department of Primary Industries (1999) *Review of Fisheries Act 1994 and Associated Regulations: Interim Report and Invitation for Public Submissions*.
- Queensland Health (1998) *Review of the Health Act 1937 (Public Health): Draft Policy Paper for Consultation*.
- Queensland Water Reform Unit (1999) *Water (Allocation and Management) Bill: Exposure Draft and Explanatory Material*.
- Queensland Water Reform Unit (1999) *A Regulatory Framework for the Provisions of Water Services in Queensland: Draft Policy Paper*.
- Queensland Water Reform Unit (1999) *Improved Planning for the Supply of Water in Queensland: Draft Policy Paper*.
- Queensland Water Reform Unit (1999) *Governance Requirements for Public Sector Water Service Providers: Draft Policy Paper*.
- Renton, Lord (1986) *Codes of Practice and Legislation*, House of Lords Parliamentary Debates, volume 468, 15 January 1986 at column 1093.
- Vincent, M. (1996) "Chapter 7 (Environmental Protection Act). Miscellaneous". in Fisher, D. & Walton, M. (eds) *Environmental Law*, Law Book Company, Sydney.
- Wald, P. (1997) 'ADR and the Courts: An Update' 46 *Duke Law Journal* 1445. WBM Oceanics (1999) *Stormwater Recycling Background Study*.
- Wright, I., Austin, M. and Hawthorne, S. (1998) *Wastewater: Use, Reuse and the Law in Queensland*, QELA Seminar on Wastewater Use and Reuse in Queensland, Brisbane, 31 August 1998.
- Wright, I. (1998) *Wastewater Reuse and Disposal in Queensland*, Paper presented to the Australian Water and Wastewater Association (QLD) Branch and the Queensland Environmental Law Association, July 1998.
- Wright, I (1994) *The Reuse of Wastewater — A Legal Perspective*, Paper Presented to the New South Wales Recycled Water Co-ordination Committee Seminar on Recycled Water, May 1994.
- Wright, I. & Lynch, M. (1993) *Legal Aspects of Treated Wastewater Reuse and Disposal*, Paper Presented to the Regional Conference of Australian Water and Wastewater Association on Water Conservation and Reuse, November 1993.

APPENDIX 1

REVIEW OF EXISTING LEGISLATION

RELEVANT TO WASTEWATER RECYCLING

Citation	BEACH PROTECTION ACT 1968
Regulations	<i>Nil</i>
Reprint Number	1
Administered by	Minister for Environment and Heritage
Relevance to Wastewater recycling	<p>The Act regulates activities which affect coastal management control districts and areas to which erosion prone area plans relate.</p> <p>Therefore, should recycled wastewater be used in a coastal management control district or an area to which an erosion prone area plan relates, the restrictions imposed by the Act must be taken into consideration.</p>
Objects of the Act	<p>The object of the Act is to provide for the regulation of and the provision of advice in respect of certain activities affecting the coast, to minimise damage to property from erosion or encroachment by tidal water and for those purposes to establish an authority and to confer and impose upon it certain functions and powers (Long Title).</p>
Obligations	
<p>Licences/Permits/Approvals</p> <ul style="list-style-type: none"> The permission of the Beach Protection Authority must be obtained in order to drain or to flow any water or other fluid across or through unoccupied Crown land in a coastal management control district or in an area to which an erosion prone area plan relates (s.47(1A)). A permit is required to erect or alter a building or other structure in a coastal management control district (s.44). <p>Requirements</p> <ul style="list-style-type: none"> A coastal management plan may be made for a coastal management control district (s.38). The Beach Protection Authority may make arrangements with local government, port authorities or river improvement trusts for carrying out the works, steps and things necessary to implement the plan (s.39(1)). A local government, port authority or river improvement trust is required to maintain any works carried out by it under an arrangement entered into for the purpose of implementing a coastal management plan (s.39(4)). A local government, port authority, river improvement trust or other person must not do anything that to its knowledge: <ul style="list-style-type: none"> is contrary in any respect to the works, steps or things provided for in a coastal management plan; or is likely to make the implementation of the coastal management plan more difficult than would otherwise be the case; or is likely to increase the cost of implementing the coastal management plan (s.39(6)). Where land to be affected by a proposed planning scheme is in a coastal management control district or in an area to which an erosion prone area plan relates, the local government must obtain the Beach Protection Authority's views before applying to the Governor-in-Council for approval of the proposed planning scheme under the <i>Integrated Planning Act 1997</i> (s.41B). <p>Reporting</p> <ul style="list-style-type: none"> Nil. 	

Enforcement

Offences & Penalties

- It is an offence for a local government, port authority, river improvement trust or other person to do anything that to its knowledge:
 - is contrary in any respect to the works, steps or things provided for in a coastal management plan; or
 - is likely to make the implementation of that plan more difficult than would otherwise be the case; or
 - is likely to increase the cost of implementing the plan (s.39(6)). Maximum penalty — 20 penalty units.
- It is an offence to drain or to flow any water or other fluid across or through unoccupied Crown land in a coastal management control district, or in an area to which an erosion prone area plan relates, without the permission of the Beach Protection Authority (s.47(1A)). Maximum penalty — 50 penalty units, and 5 penalty units for each day on which the offence is continued.
- It is an offence to wilfully obstruct any person entering land under the authority of the Act (s.49). Maximum penalty — 20 penalty units.
- It is an offence for a person to obstruct, resist or hinder a person authorised under the Act to perform any work or do any act or thing in the exercise of that person's authority (s.53). Maximum penalty — 10 penalty units.
- Any person who contravenes or fails to comply with any provision of the Act commits an offence against the Act (s.54). Maximum penalty — 30 penalty units unless otherwise specifically provided.

Other Enforcement Mechanisms

- Where a person has done anything:
 - contrary in any respect to the works, steps or things provided for in a coastal management plan; or
 - likely to make the implementation of that plan more difficult than would otherwise be the case; or
 - likely to increase the cost of implementing the plan,

the Minister may direct the person to cease doing the thing and restore the land as nearly as practicable to the condition in which it was immediately prior to the time at which the thing commenced, or to carry out, take or do such works, steps or things as agreed by the person and the Minister (s.39(7)). Failure to comply with the notice is an offence. Maximum penalty — 10 penalty units per day that failure to comply with the notice continues.

- Where the person fails to comply with a notice, the Minister may carry out the works required by the notice, with all expenses incurred in doing so being a debt due to the Minister by the person to whom the notice was given (s.39(10) & s.39(11)).
- Where a person commits an offence against section 47(1A) of the Act and as a consequence of the offence damage is caused to the land, the Beach Protection Authority may restore the land and recover the expenses incurred in doing so as a debt from that person (s.47(2A)).

Investigation Powers

- The Beach Protection Authority, a local government, a port authority and a river improvement trust may enter upon any land for the purpose of making any inspection, valuation, survey or taking levels (s.49).

Definitions

coast means all land, including the bed and banks of any river, stream, watercourse, lake or other body of water that is situated:

- above the highest astronomical tide mark and within 400 metres of that mark, as measured by the shortest distance from that mark; or
- below the highest astronomical tide mark.

This definition applies with respect to every island forming part of the State of Queensland. The Governor-in-Council may amend the definition of "coast" by substituting a greater distance than that of 400 metres.

coastal management means the works, activities, maintenance and other matters considered by the Beach Protection Authority to be necessary or expedient to protect the amenity of the coast and, subject thereto, to minimise damage to property from erosion or encroachment by tidal water.

coastal management control district means a part of the coast that is declared or deemed to be declared under the Act to be a coastal management control district.

coastal management plan means a plan prepared by the Beach Protection Authority under the Act that states in general terms the future preferred coastal management for land situated in a coastal management control district.

erosion prone area plan means a plan prepared by the Beach Protection Authority under the Act specifying areas of the coast that, in the opinion of the Beach Protection Authority, may be subject to erosion or encroachment by tidal water.

river improvement trust means a trust constituted by or under the *River Improvement Trust Act 1940*.

unoccupied Crown land means all land except land which is for the time being lawfully granted or contracted to be granted in fee simple by the Crown or is subject to any lease or licence lawfully granted by the Crown.

Checklist

- Is recycled wastewater to be used in a coastal management control district?
- If so, are mechanisms in place to ensure that the use of recycled wastewater is in accordance with the coastal management plan?
- Where wastewater treatment facilities are to be located within a coastal management control district, has the permission of the Beach Protection Authority been obtained to erect any buildings or structures?
- Are mechanisms in place to ensure that recycled wastewater does not flow across or through unoccupied Crown land in a coastal management control district, or in an area to which an erosion prone area plan relates, without the permission of the Beach Protection Authority?
- If the use of recycled wastewater in a coastal management control district or an area to which an erosion prone area plan relates is to be regulated under a planning scheme, has the local government obtained the views of the Beach Protection Authority?

Citation	CHEMICAL USAGE (AGRICULTURAL AND VETERINARY) CONTROL ACT 1988
Regulations	<i>Chemical Usage (Agricultural and Veterinary) Control Regulations 1989</i>
Reprint Number	2
Administered by	Minister for Primary Industries
Relevance to Wastewater recycling	<p>The Act regulates dealings with plants under cultivation which may be affected by residue or disease. Therefore, where it is proposed to use recycled wastewater on land upon which plants are cultivated, regard must be had to the restrictions imposed by the Act.</p> <p>The object of the Act is to control the use of certain chemicals and the use of substances in or on which is the residue of certain chemicals (Long Title).</p>
Objects of the Act	The object of the Act is to control the use of certain chemicals and the use of substances in or on which is the residue of certain chemicals.

Obligations

Licences/Permits/Approvals

- Written approval of the standards officer is required where a person wishes to:
 - use, destroy, dispose of or otherwise deal with any prescribed substance; or
 - cultivate plants on any land,

within a time or in a manner that is contrary to a direction contained in a notice issued by the standards officer or an inspector requiring that the person not use, destroy, dispose of or otherwise deal with any prescribed substance, or that the person not cultivate plants on particular land (s.17(1)).

Requirements

- The standards officer or an inspector may, by notice in writing given to a prescribed person, direct that person not to use, destroy, dispose of or otherwise deal with a prescribed substance to which the notice relates otherwise than as permitted by the notice (s.16(1)).
- If the standards officer or an inspector suspects or believes on reasonable grounds that the cultivation of plants on any land is likely to result in the residue of a chemical being present in or on any agricultural produce in an amount that exceeds the maximum residue limit prescribed for that produce, the standards officer or inspector may, by written notice to the owner or occupier of the land, direct that person not to cultivate any plants or any class of plants on the land otherwise than as permitted by the notice (s.16(2)).
- If the chief executive is notified by the standards officer that the residue of a chemical is in or on:
 - a portion or sample of any agricultural produce or manufactured stock food in an amount that exceeds the maximum residue limit prescribed for that produce or stock food; or
 - a portion or sample of any plants from which agricultural produce may be derived and the chief executive forms the opinion that agricultural produce derived from the plants is likely to have the residue of a chemical in an amount that exceeds the maximum residue limit prescribed for that produce; or
 - a portion or sample of any other substance and the chief executive forms the opinion that the ordinary use of the substance is likely to result directly or indirectly in any agricultural produce or manufactured stock food having a residue of a chemical in an amount that exceeds the maximum residue limit prescribed for that produce or stock food,

the chief executive may by notice in writing given to any person in possession of the agricultural produce, manufactured stock food, plants or other substance from which the portion or sample was taken, direct the person to destroy or otherwise dispose of it in the manner and within the time specified in the notice (s.18(1)).

Reporting

- Nil.

Enforcement

Offences & Penalties

- It is an offence to fail to comply with section 16 (Notice relating to agricultural produce etc containing chemical residues) of the Act without reasonable excuse. Maximum penalty —100 penalty units.
- It is an offence to use, destroy, dispose of or otherwise deal with a prescribed substance or cultivate plants on land contrary to an approval under section 17 (Approval to use etc agricultural produce etc or cultivate plants on land) of the Act. Maximum penalty — 100 penalty units.
- It is an offence to use, destroy, dispose of or otherwise deal with a substance to which a notice under section 18 (Destruction of agricultural produce at the direction of chief executive) of the Act relates otherwise than as directed by the notice (s.18(2)). Maximum penalty — 40 penalty units.

Other Enforcement Mechanisms

- If a person to whom a notice is given under section 18 fails to comply with any direction within the notice within the time specified, the standards officer may do anything required by the direction and recover the expenses incurred in doing so from the recipient of the notice (s.19).

Investigation Powers

- The standards officer has the power of entry and the power to use vehicles and equipment considered necessary to carry out the works required by a notice issued under section 18 (Destruction of agricultural produce etc at direction of chief executive) of the Act (s.19(3)).
- Inspectors have a wide range of powers of investigation under section 20 (Powers of inspectors) of the Act including the power of entry, power to remove samples of any prescribed substance or any chemical for analysis and the power to require the production of documents.

Definitions

agricultural chemical product is a substance or mixture of substances that is represented, impacted, manufactured, supplied or used as a means of directly or indirectly:

- destroying, stupefying, repelling, inhibiting the feeding of or preventing infestation by or attack of, any pest in relation to a plant, a place or a thing; or
- destroying a plant; or
- modifying the physiology of a plant or pest so as to alter its natural development, productivity, quality or reproductive capacity; or
- modifying an effect of another agricultural chemical product; or
- attracting a pest for the purpose of destroying it.

agricultural product means any plant, part of a plant or the produce of a plant, whether processed or not, that is intended or normally used for human or animal consumption.

chemical means a chemical product or another substance prescribed by regulation to be a chemical.

chemical product means an agricultural chemical product or a veterinary chemical product, or both.

manufactured stock food has the meaning given in the *Agricultural Standards Act 1994*.

maximum residue limit, in relation to the residue of a chemical in or on any agricultural produce or manufactured stock food, means the maximum residue limit prescribed in respect of that chemical for that agricultural produce or manufactured stock food.

In relation to agricultural produce intended or normally used for human consumption:

- the prescribed maximum residue limit in respect of each chemical listed in the MRL Standard shall be:
 - for an item of agricultural produce set out in the Column of the MRL Standard headed "FOOD", the maximum residue limit set opposite each item respectively;
 - for an item of agricultural produce not set out in the MRL Standard, zero, unless the use of the chemical in relation to the item of agricultural produce concerned is permitted pursuant to the Act; and
- the prescribed maximum residue limit for a chemical not listed in the MRL Standard shall be zero unless the use of the chemical in relation to the particular agricultural produce concerned is permitted under the Act.

In relation to agricultural produce intended or normally used for animal consumption, the prescribed maximum residue limit in respect of each chemical listed in schedule 2, column 1, shall be the maximum residue limit set opposite that chemical in schedule 2, column 2 (Regulation, s.4).

MRL Standard means the National Registration Authority for Agricultural and Veterinary Chemicals, *MRL Standard Maximum Residue Limits in Food and Animal Feedstuffs of Agricultural and Veterinary Chemicals and Associated Substances*, published by the Australian Government Publishing Service, Canberra.

plant includes any tree, vine, shrub, vegetable, edible fungus or alga.

prescribed person means a person having possession of any prescribed substance or, where the prescribed substance is in transit, the person into whose possession it is to be delivered.

prescribed substance means:

For section 16 (Agricultural produce etc containing chemical residues not to be used etc):

- agricultural produce or manufactured stock food in or on which the standards officer or inspector suspects or believes on reasonable grounds that there is the residue of a chemical in an amount that exceeds the maximum residue limit prescribed for that produce or stock food; or
- plants from which agricultural produce may be derived in or on which the standards officer or inspector suspects or believes on reasonable grounds that there is the residue of a chemical in an amount such that agricultural produce derived from the plants is likely to have a residue of a chemical in an amount that exceeds the maximum residue limit prescribed for that produce; or
- a substance in or on which the standards officer or inspector suspects or believes on reasonable grounds that there is the residue of a chemical in such an amount that the ordinary use of the substance is likely to result, directly or indirectly, in the residue of a chemical being in or on any agricultural produce or manufactured stock food in an amount that exceeds the maximum residue limit prescribed for that produce or stock food.

For section 17 (Approval to use etc agricultural produce etc or cultivate plants on land) agricultural produce, manufactured stock food, plant or other substance.

residue in relation to a chemical, includes, in addition to any of that chemical, any derivative or metabolite of the chemical.

Checklist

- Where recycled wastewater is to be used upon land on which plants are cultivated, are there mechanisms in place to ensure that the residue levels in such plants will be within the maximum residue limits required by the Act?

Citation	COASTAL PROTECTION AND MANAGEMENT ACT 1995
Regulations	<i>Nil</i>
Reprint Number	1
Administered by	Minister for Environment and Heritage
Relevance to Wastewater recycling	The Act regulates activities within the coastal zone through the use of coastal management plans and control districts. Therefore, should recycled wastewater be used in a coastal zone, regard must be had to any applicable coastal management plan.
Objects of the Act	<p>The object of the Act is to:</p> <ul style="list-style-type: none"> • provide for the protection, conservation, rehabilitation and management of the coast, including its resources and biological diversity; and • have regard to the goal, core objectives and guiding principles of the National Strategy for Ecologically Sustainable Development in the use of the coastal zone; and • provide, in conjunction with other legislation, a coordinated and integrated management and administrative framework for the ecologically sustainable development of the coastal zone; and • encourage the enhancement of knowledge of coastal resources and the effect of human activities on the coastal zone (s.3).
Obligations	
<p>Licences/Permits/Approvals</p> <ul style="list-style-type: none"> • Nil. <p>Requirements</p> <ul style="list-style-type: none"> • The Minister is required to prepare a State coastal management plan for the coastal zone (s.25). The coastal management plan may include a statement of the principles and policies by which the coastal zone is to be managed and may also deal with the use or development of land in a control district or activities in a control district (s.26). • The Minister is required to prepare a regional coastal management plan for parts of the coastal zone (s.30). The plan may make provision about the use or development of land in a control district and the activities in a control district, and may also: <ul style="list-style-type: none"> - describe the principles, policies and requirements by which the coastal zone in the region will be managed; and - describe a scheme of coastal management works, including maintenance of the works by a local government, port authority or statutory authority; and - identify key coastal sites requiring special coastal management (s.31). • The chief executive must implement coastal plans (s.43). However, the chief executive may arrange with a local government, port authority or statutory authority to carry out or maintain the works necessary to implement a coastal management plan. • An area may be declared as a control district under a regional plan, a regulation or the written notice of the Minister (s.47). A control district may be declared: <ul style="list-style-type: none"> - over a foreshore and over land up to 400 metres in land from the high water mark along the foreshore; or - over a river mouth or estuarine delta and over land up to 1,000 metres inland from the high water mark at the river mouth or estuarine delta; or - along tidal rivers, salt water lakes and other bodies of internal tidal waters and over land up to 100 metres from the high water mark along the river, lake or water body (s.48). • A control district may also include all or part of a coastal wetland or a key coastal site, and up to 100 metres from the wetland or the key coastal site. 	

- For an activity in a control district, the chief executive may give a notice (called a coastal protection notice) to a person directing the person to take the reasonable action stated in the notice to protect the land, or to stop or not start an activity, if satisfied that the activity is likely to have a significant effect on coastal management (s.52). The notice may require the person to restore the land.

Reporting

- Nil.

Enforcement

Offences & Penalties

- It is an offence to fail to comply with a coastal protection notice (s.52). Maximum penalty — 3,000 penalty units.
- It is an offence to obstruct an authorised person in the exercise of a power conferred under the Act, unless the person has a reasonable excuse for doing so (s.77). Maximum penalty — 100 penalty units.

Other Enforcement Mechanisms

- If a person fails to comply with a coastal protection notice, the chief executive may take the action required by the notice and recover the costs and expenses reasonably incurred in doing so as a debt from the person to whom the notice was directed (s.54).

Investigation Powers

- An authorised person has wide powers of investigation under the Act including the power to enter land and the power to require the name and address of a person (Chapter 3, Part 2).

Definitions

coast is all areas within or neighbouring the foreshore.

coastal management includes the protection, conservation, rehabilitation, management and ecologically sustainable development of the coastal zone.

coastal resources means the natural and cultural resources of the coastal zone.

coastal waters are Queensland waters to the limit of the highest astronomical tide.

coastal wetlands include tidal wetlands, estuaries, salt marshes, melaleuca swamps (and any other coastal swamps), mangrove areas, marshes, lakes or minor coastal streams regardless of whether they are of a saline, freshwater or brackish nature.

coastal zone is the coastal waters and all areas to the landward side of coastal waters in which there are physical features, ecological or natural processes or human activities that affect, or potentially affect, the coast or coastal resources.

control district means a part of the coastal zone declared under the Act as a control district.

foreshore means the land lying between the high water mark and low water mark as is ordinarily covered and uncovered by the flow and ebb of the tide at spring tides.

Checklist

- Is recycled wastewater being used in an area to which a coastal management plan relates?
- If so, is the use in accordance with the provisions of the coastal management plan?
- Are all applicable coastal protection notices being complied with?

Citation	ENVIRONMENTAL PROTECTION ACT 1994
Regulations	<i>Environmental Protection Regulation 1998</i>
Reprint Number	3
Administered by	Environmental Protection Agency or the local government where an environmentally relevant activity has been devolved.
Relevance to Wastewater recycling	The Environmental Protection Act deals with: <ul style="list-style-type: none"> • the licensing of environmentally relevant activities; and • managing activities which cause environmental harm; and • contaminated land.
Objects of the Act	The object of the Act is to protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends (that is, ecologically sustainable development) (s.3).

Obligations

Licences/Permits/Approvals

- A licence or level 1 approval is required in order to carry out a level 1 environmentally relevant activity (s.39).
- A level 2 approval is required in order to carry out a level 2 environmentally relevant activity (Regulation, s.5(1)). This requirement is inapplicable if:
 - the environmentally relevant activity is carried out under a single environmental authority issued under section 61 (Single applications and environmental authorities) of the Act; or
 - the person has a development approval for carrying out the environmentally relevant activity (Regulation, s.5(2)).
- When considering an application for an environmental authority for an environmentally relevant activity which does not also require a development approval under the *Integrated Planning Act 1997*, or the conditions that should be attached to the environmental authority, the administering authority:
 - must comply with an environmental protection policy requiring it to:
 - > follow stated procedure in evaluating an application for an environmental authority; or
 - > grant or refuse to grant an application for an environmental authority or impose conditions on an environmental authority; and
 - must consider, subject to the above:
 - > the standard criteria; and
 - > additional information given in relation to the application; and
 - > any report about the applicant's suitability to hold, or continue to hold, an environmental authority; and
 - > views expressed at a conference held in relation to the application (s.44).
- The administering authority may issue an environmental authority subject to the relevant conditions the administering authority considers necessary or desirable, including a requirement to:
 - install and operate a stated plant or equipment in a stated way within a stated time;
 - take stated measures to minimise the likelihood of environmental harm being caused;
 - carry out and report on a stated monitoring program;
 - prepare and carry out an environmental management program; and
 - give relevant information reasonably required by the administering authorities for the administration or enforcement of the Act (s.46).
- The conditions must also include any the administering authority is required to impose under an applicable environmental protection policy (s.46).
- When assessing an application for a licence for a level 1 environmentally relevant activity which requires a development permit under schedule 8 of the *Integrated Planning Act 1997*, the administering authority must consider:

- additional information given in relation to the application; and
- any reports in relation to the applicant's suitability to hold, or continue to hold, a licence; and
- any submission by the applicant for an integrated environmental management system for the environmentally relevant activity (s.60I).
- The administering authority may only impose conditions on such a licence that require an integrated environmental management system for the environmentally relevant activity or require a financial assurance (s.60K).
- When assessing an application for a level 1 approval for a level 1 environmentally relevant activity which also requires a development permit under schedule 8 of the Integrated Planning Act, the administering authority may only grant the application if it is satisfied that the risk of environmental harm from the environmentally relevant activity is insignificant because of:
 - any applicable cleaner production techniques used by the licensee; and
 - any applicable waste minimisation practices used by the licensee; and
 - contingency plans the licensee has developed to manage abnormal or emergency situations that may arise in carrying out the environmentally relevant activity; and
 - the licensee's implementation of best practice environmental management technique resulting in levels of environmental protection over and above the levels required by the development conditions of the development approval for the environmentally relevant activity; and
 - the licensee's compliance with the general environmental duty (s.60Q).
- The administering authority may only impose conditions on the approval that require an integrated environmental management system for the environmentally relevant activity (s.60S).

Requirements

Environmental Harm

- A person must not carry out any activity that causes, or is likely to cause, any environmental harm unless the person takes all reasonable and practical measures to prevent or minimise the harm (general environmental duty) (s.36). In deciding the measures to be taken, regard must be had to:
 - (a) the nature of the harm or potential harm; and
 - (b) the sensitivity of the receiving environment; and
 - (c) the current state of technical knowledge for the activity; and
 - (d) the likelihood of successful application of the different measures that might be taken; and
 - (e) the financial implications of the different measures as they would relate to the type of activity.
- The Minister may gazette approved codes of practice stating ways of achieving compliance with the general environmental duty for any activity that causes, or is likely to cause, environmental harm (s.219).
- If a person while carrying out an activity becomes aware that serious or material environmental harm is caused or threatened by the person's or someone else's act or omission, the person must:
 - (a) if the person is carrying out the activity during the person's employment:
 - (i) tell the employer of the event, its nature and the circumstances in which it happened. The employer must then immediately give written notice to the administering authority of the event, its nature and the circumstances in which it happened; or
 - (ii) if the employer cannot be contacted — give written notice to the administering authority of the event, its nature and the circumstances in which it happened; or
 - (b) if paragraph (a) does not apply to the person — give written notice to the administering authority of the event, its nature and the circumstances in which it happened.
- This requirement does not apply if the harm is authorised to be caused under an environmental protection policy, an environmental management program, an environmental protection order, an environmental authority, a development condition of a development approval, or an emergency direction (s.37).
- A person must not unlawfully cause serious environmental harm (s.120).
- A person must not unlawfully cause material environmental harm (s.121).
- A person must not unlawfully cause an environmental nuisance (s.123).
- A person must not contravene an environmental protection policy (s.124).

- A person must not release, or cause to be released, a prescribed contaminant into the environment other than under an authorised person's emergency direction (s.125). A prescribed contaminant is a contaminant prescribed by an environmental protection policy (s.125).
- A person must not cause or allow a contaminant to be placed in a position where it could reasonably be expected to cause serious or material environmental harm, or environmental nuisance (s.126).

Waste Management

- The chief executive may require a local government to carry out works for the removal, collection, transport, storage, treatment or disposal of waste (s.118A).
- A person must not, for fee or reward, remove, collect, transport, store, treat or dispose of waste in a local government area other than under a written contract with the local government or with the local government's written approval (s.118B).

Contaminated Land

- If the administering authority decides that land has been, or is being, used for a notifiable activity or is contaminated land, the administering authority must record the particulars of the land in the Environmental Management Register (s.118H). However, this requirement does not apply if the land is no longer being used for a notifiable activity and the land has been investigated and the administering authority is satisfied that the land is not contaminated land.
- The administering authority may require a site investigation to be conducted or commissioned by the person who released the contaminant, the local government for the area in which the land is located or the owner of the land if it is satisfied:
 - after a preliminary investigation, particulars of the land are recorded in the Environmental Management Register because the land is contaminated land; and
 - the hazardous contaminant contaminating the land is in a concentration that has the potential to cause serious or material environmental harm; and
 - a person, animal or another part of the environment may be exposed to the hazardous contaminant (s.118J).
- Within 28 days of being given a site investigation report, the administering authority must consider the report and decide whether the land is contaminated land. After making its decision, the administering authority may:
 - if the administering authority is satisfied the land is not contaminated land, remove particulars of the land from the Environmental Management Register; or
 - if the administering authority is satisfied the land is contaminated land that can be used for stated uses with further management - leave the particulars of the land on the Environmental Management Register and prepare, or require another person to prepare, a site management plan for the land; or
 - if the administering authority is satisfied the land is contaminated land, and action needs to be taken to remediate the land to prevent serious environmental harm to a person, animal or other part of the environment, record particulars of the land in the Contaminated Land Register; or
 - in any other case - leave particulars of the land on the Environmental Management Register (s.118R).
- The administering authority may require the person who released the hazardous contaminant, the local government for the area in which the land is located or the owner of the land, to conduct or commission work to remediate the land for which particulars are recorded in the Contaminated Land Register (s.118Y). Within 28 days after being given a validation report concerning the remediation works, the administering authority must consider the report and decide whether the land is still contaminated land (s.118ZD). After making its decision, the administering authority may:
 - if the administering authority is satisfied that the land is no longer contaminated land —remove particulars of the land from the Contaminated Land Register; or
 - if the administering authority is satisfied the land has been partially remediated but it is still contaminated land that requires further management — record particulars of the land in the Environmental Management Register and prepare, or require another person to prepare, a site management plan for the land; or
 - in any other case — leave particulars of the land on the Contaminated Land Register.
- The administering authority may prepare a site management plan for land or require a draft site management plan to be prepared and submitted to it for approval by the person who released the contaminant, the local government for the area in which the land is located or the owner of the land where:
 - particulars of land are recorded in the Environmental Management Register or Contaminated Land Register; and
 - the land is contaminated land; and

- a site investigation of the land has been conducted; and
- the contamination may be managed by applying conditions to the use, development, or activities carried out on the land (s.118ZM).
- A person is required to comply with a site management plan and a local government must not, under an approval or other authority under any Act, allow the use or development of, or an activity to be carried out on, land in a way that contravenes the site management plan for the land (s.118ZY).

Reporting

- As required by conditions of an environmental authority, a site management plan or an environmental management program.

Enforcement

Offences & Penalties

Environmental Authorities

- It is an offence to breach section 39 (Level 1 licence or approval required for environmentally relevant activity) of the Act. Maximum penalty — 400 penalty units.
- It is an offence to breach section 5 (Approval required for level 2 environmentally relevant activity) of the Regulation. Maximum penalty — 165 penalty units.
- It is an offence for the holder of an environmental authority to wilfully contravene a condition of the authority (s.70(1)). Maximum penalty:
 - for a licence or level 1 approval — 2,000 penalty units or 2 years imprisonment; or
 - for a level 2 approval — 300 penalty units.
- It is an offence for the holder of an environmental authority to contravene a condition of the authority (s.70(2)). Maximum penalty:
 - for a licence or level 1 approval — 1,665 penalty units; or
 - for a level 2 approval — 250 penalty units.

Environmental Harm

- It is an offence to fail to comply with the duty to notify the administering authority of environmental harm (s.37). Maximum penalty — 100 penalty units.
- It is an offence to wilfully and unlawfully cause serious environmental harm (s.120(1)). Maximum penalty — 4,165 penalty units or 5 years imprisonment.
- It is an offence to unlawfully cause serious environmental harm (s.120(2)). Maximum penalty - 1,665 penalty units.
- It is an offence to wilfully and unlawfully cause material environmental harm (s.121(1)). Maximum penalty — 1,665 penalty units or 2 years imprisonment.
- It is an offence to unlawfully cause material environmental harm (s.121(2)). Maximum penalty — 835 penalty units.
- It is an offence to wilfully and unlawfully cause an environmental nuisance (s.123(2)). Maximum penalty — 835 penalty units.
- It is an offence to unlawfully cause an environmental nuisance (s.123(2)). Maximum penalty — 165 penalty units.
- It is an offence to wilfully contravene an environmental protection policy (s.124(1)). Maximum penalty:
 - for a class 1 environmental offence — 1,665 penalty units or 2 years imprisonment;
 - for a class 2 environmental offence — 835 penalty units;
 - for a class 3 environmental offence — 85 penalty units.
- It is an offence to contravene an environmental protection policy (s.124(2)). Maximum penalty:
 - for a class 1 environmental offence — 835 penalty units;
 - for a class 2 environmental offence — 165 penalty units;
 - for a class 3 environmental offence — 50 penalty units.
- It is an offence to release a prescribed contaminant (s.125). Maximum penalty — 165 penalty units.

- It is an offence to place a prescribed contaminant in a place where environmental harm or environmental nuisance may be caused (s.126). Maximum penalty — 165 penalty units.
- It is an offence to interfere with any monitoring equipment used under the Act or under a development condition of a development approval (s.127). Maximum penalty — 165 penalty units.

Development Offences

- It is an offence to wilfully contravene a development condition of a development approval (s.60ZF(1)). Maximum penalty — 2,000 penalty units or 2 years imprisonment.
- It is an offence to contravene a development condition of a development approval (s.60ZF(2)). Maximum penalty — 1,665 penalty units.

Environmental Evaluations

- It is an offence to fail to comply with a request to commission an environmental audit (s.72). Maximum penalty — 100 penalty units.
- It is an offence to fail to comply with a request to commission an environmental investigation (s.73). Maximum penalty — 100 penalty units.

Environmental Management Programs

- It is an offence for the holder of an approval of an environmental management program to wilfully contravene the program (s.96(1)). Maximum penalty — 1,665 penalty units or 2 years imprisonment.
- It is an offence for the holder of an approval of an environmental management program to contravene the program (s.96(2)). Maximum penalty — 835 penalty units.

Environmental Protection Orders

- It is an offence to wilfully contravene an environmental protection order (s.112(1)). Maximum penalty — 2,000 penalty units or 2 years imprisonment.
- It is an offence to contravene an environmental protection order (s.112(2)). Maximum penalty — 1,665 penalty units.

Contaminated Land

- It is an offence to breach section 118J (Notice to conduct a site investigation) of the Act. Maximum penalty — 100 penalty units.
- It is an offence to breach section 118Y (Notice to remediate land) of the Act. Maximum penalty — 1,000 penalty units.
- It is an offence to breach section 118ZM (Notice to prepare or commission a site management plan) of the Act. Maximum penalty — 100 penalty units.
- It is an offence to wilfully contravene a site management plan (s.118ZY(1)). Maximum penalty — 1,665 penalty units or 2 years imprisonment.
- It is an offence to contravene a site management plan (s.118ZY(2)). Maximum penalty — 835 penalty units.

Enforcement Offences

- It is an offence to fail to comply with a notice given by the administering authority requiring information relevant to the administration or enforcement of the Act without a reasonable excuse for not complying (s.159). Maximum penalty — 50 penalty units.
- It is an offence to fail to comply with a requirement of an authorised person dealing with an emergency to give reasonable help to the authorised person without a reasonable excuse for not complying (s.162). Maximum penalty — 100 penalty units.
- It is an offence to fail to comply with a requirement of an authorised person to give reasonable help to the authorised person without a reasonable excuse for not complying (s.163). Maximum penalty — 50 penalty units.
- It is an offence for a person to fail to state their name and address if required to do so by an authorised person without a reasonable excuse for not doing so (s.164(1)). Maximum penalty — 150 penalty units.
- It is an offence for a person to fail to provide evidence of the correctness of their name and address if required to do so by an authorised person without a reasonable excuse for not doing so (s.164(2)). Maximum penalty — 50 penalty units.
- It is an offence to fail to answer questions when required to do so by an authorised person without a reasonable excuse for not answering (s.165). Maximum penalty — 50 penalty units.

- It is an offence to fail to produce for inspection a document required to be held or kept under the Act, or a development condition of a development approval, if required by an authorised person without a reasonable excuse for not doing so (s.166). Maximum penalty — 50 penalty units.
- It is an offence to fail to comply with a notice given by an authorised officer during an emergency without a reasonable excuse for not complying (s.169). Maximum penalty — 100 penalty units.
- It is an offence to breach section 170 (Emergency directions and prevention or minimisation of environmental harm) of the Act. Maximum penalty — 100 penalty units.
- It is an offence to give the administering authority or an authorised person a document containing information that is known to be false, misleading or incomplete in a material particular (s.171). Maximum penalty — 165 penalty units.
- It is an offence to:
 - state anything to an authorised person that is known to be false or misleading in a material particular; or
 - omit from a statement made to an authorised person anything without which the statement is known to be misleading in a material particular (s.172).Maximum penalty — 165 penalty units.
- It is an offence to obstruct an authorised person in the exercise of a power under the Act without a reasonable excuse for doing so (s.173). Maximum penalty — 100 penalty units.
- It is an offence to contravene a restraint order (s.194). Maximum penalty — 3,000 penalty units or 2 years imprisonment.
- It is an offence to contravene an order of the court which has been made pending a determination of a proceeding for a restraint order (s.195). Maximum penalty — 3,000 penalty units or 2 years imprisonment.
- It is an offence to contravene an enforcement order or interim enforcement order (s.195E). Maximum penalty — 3,000 penalty units or 2 years imprisonment.

Waste Management

- It is an offence to contravene section 118B (Waste removal by private contractors) of the Act. Maximum penalty — 100 penalty units.

Other Enforcement Mechanisms

- A licence to carry out a level 1 environmentally relevant activity may be suspended or cancelled by the administering authority if the licensee is convicted of an offence against the Act, or the licence was issued because of a materially false or misleading representation or declaration (s.59 & s.60M).
- A level 1 approval to carry out a level 1 environmentally relevant activity may be suspended or cancelled by the administering authority if the approval holder is convicted of an offence against the Act, or the level 1 approval was issued because of a materially false or misleading representation or declaration (s.60D & s.60U).
- The administering authority may require a person to conduct or commission an environmental audit and submit a report if the administering authority is satisfied on reasonable grounds that:
 - a licensee is not complying with the licence conditions; or
 - a person is not complying with a development condition of a development approval; or
 - a person is not complying with an environmental protection policy or management program (s.72).
- The administering authority may require the person who has carried out, is carrying out or is proposing to carry out, an activity to conduct or commission an environmental investigation and submit a report if the administering authority is satisfied on reasonable grounds that:
 - an event has happened causing serious or material environmental harm while the activity was being carried out; or
 - the activity or proposed activity is causing, or is likely to cause serious or material environmental harm (s.73).
- If the administering authority accepts the report of the environmental audit or environmental investigation, it may:
 - require the recipient to prepare and submit an environmental management program; and
 - if the recipient is a licensee, amend conditions of the recipient's licence; and
 - if the recipient is the holder of a development approval, change or cancel a development condition of the approval; and

- serve an Environmental Protection Order on the recipient; and
- take any other action it considers appropriate (s.76).
- The administering authority may require a person or public authority to prepare, and submit to it for approval, a draft environmental management program if it is satisfied:
 - an activity carried out, or proposed to be carried out, by the person or public authority is causing, or may cause, unlawful environmental harm; or
 - it is not practicable for the person or public authority to comply with an environmental protection policy or regulation on its commencement (s.82).
- The administering authority may issue an Environmental Protection Order to a person:
 - if the person does not comply with the requirement to conduct or commission an environmental evaluation and submit it to the administering authority; or
 - if the person does not comply with the requirement to prepare an environmental management program and submit it to the administering authority; or
 - if because of an environmental evaluation, the administering authority is satisfied unlawful environmental harm is being, or is likely to be, caused by an activity carried out, or proposed to be carried out, by the person; or
 - to secure compliance by the person with:
 - > the general environmental duty; or
 - > an environmental protection policy; or
 - > a condition of an environmental authority; or
 - > a development condition of a development approval (s.109).
- The administering authority may, by a condition of a licence or approval of an environmental management program or a site management plan, require the licensee or holder of the approval to give the administering authority financial assurance (s.115).

Investigation Powers

- An authorised person may enter a place if:
 - the occupier of the place consents to the entry, and if the entry is for exercising a power dealing with contaminated land, the owner of the place consents;
 - it is a public place and the entry is made when the place is open to the public; or
 - it is a licensed place and the entry is made when the environmentally relevant activity is being carried out, the place is open for the conduct of business or is otherwise open for entry; or
 - it is a place where an industry is conducted and the entry is made when the place is open for the conduct of business or is otherwise open for entry; or
 - the entry is authorised by a warrant; or
 - the entry is authorised by an order to enter contaminated land in order to conduct an investigation or conduct work (s.135).
- If unlawful environmental harm has been caused by the release of a contaminant into the environment, an authorised person may enter land for the purpose of finding out or confirming the source of the release of the contaminant (s.136).
- If the administering authority believes on reasonable grounds that land is contaminated land, an authorised person may enter the land to conduct a preliminary investigation of the land to find out whether the land is contaminated land (s.136A). However, this power does not apply to the entry of a structure used for residential purposes.
- An authorised person may apply to a Magistrate for an order to enter contaminated land:
 - to conduct a site investigation of the land; or
 - for land which is recorded in the Contaminated Land Register, to conduct work to remediate the land (s.138A).
- An authorised person may enter or board a vehicle if the authorised person has reasonable grounds for suspecting:
 - the vehicle is being, or has been, used in the commission of an offence against the Act;

- the vehicle or a thing in or on the vehicle may provide evidence of the commission of an offence against the Act; or
- the vehicle is a type described by regulation and is being used to transport waste of a type described by regulation (s.139).
- An authorised person who enters a place, or enters or boards a vehicle, may:
 - (a) search any part of the place or vehicle; or
 - (b) inspect, examine, test, measure, photograph or film, the place or vehicle or anything in or on the place or vehicle; or
 - (c) take samples of any contaminant, substance or thing in or on the place or vehicle; or
 - (d) record, measure, test or analyse the release of contaminants into the environment from the place or vehicle; or
 - (e) take extracts from, or make copies of, any documents in or on the place or vehicle; or
 - (f) take equipment and materials the authorised person reasonably requires for the purpose of exercising any powers in relation to the place or vehicle; or
 - (g) install or maintain any equipment for the purpose of conducting a monitoring program for the release of contaminants into the environment from the place or vehicle; or
 - (h) require any person in or on the place or vehicle to give the authorised person reasonable help for the exercise of the powers stated in paragraphs (a) to (g).
- An authorised person who enters a place has a general power to seize evidence (s.141).
- An authorised person has the power to require the name and address of a person (s.141), and to require the production of documents (s.146).

Definitions

class 1, 2 or 3 environmental offence means a class 1, 2 or 3 environmental offence declared to be so in an environmental protection policy.

contamination of the environment is the release (whether by act or omission) of a contaminant into the environment.

a **contaminant** can be:

- a gas, liquid or solid; or
- an odour; or
- an organism (whether alive or dead), including a virus; or
- energy, including noise, heat, radioactivity and electromagnetic radiation; or
- a combination of contaminants.

contaminated land means land contaminated by a hazardous contaminant.

Contaminated Land Register means the Register kept by the administering authority under s.213(1A)(b) of the Act.

development approval means a development approval under the *Integrated Planning Act 1997*.

emergency direction means a written direction given by an authorised person to a person to release a contaminant into the environment where the authorised person is satisfied:

- it is necessary and reasonable to release a contaminant because of an emergency; and
- there is no other practicable alternative to the release.

environment includes:

- (a) ecosystems and their constituent parts, including people and communities; and
- (b) all natural and physical resources; and
- (c) the qualities and characteristics of locations, places and areas, however large or small, that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community; and
- (d) the social, economic, aesthetic and cultural conditions that affect, or are affected by, things mentioned in paragraphs (a) to (c).

environmental authority means a licence or approval.

environmental evaluation means an environmental audit or an environmental investigation.

environmental harm is any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value, and includes environmental nuisance. Environmental harm may be caused by an activity:

- whether the harm is a direct or indirect result of the activity; or
- whether the harm results from the activity alone or from the combined effects of the activity and other activities or factors.

environmental management program is a specific program that when approved, achieves compliance with the Act for matters dealt with by the program by reducing environmental harm or detailing the transition to an environmental standard.

environmental nuisance is unreasonable interference or likely interference with an environmental value caused by:

- noise, dust, odour, light; or
- an unhealthy, offensive or unsightly condition because of contamination; or
- another way prescribed by regulation.

environmentally relevant activity means an activity stated in schedule 1 of the *Environmental Protection Regulation 1998*.

environmental value is:

- a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or
- another quality of the environment identified and declared to be an environmental value under an environmental protection policy or regulation.

hazardous contaminant means a contaminant that, if improperly treated, stored, disposed of or otherwise managed, is likely to cause a serious or material environmental harm because of:

- its quantity, concentration, acute or chronic toxic effects, carcinogenicity, teratogenicity, mutagenicity, corrosiveness, explosiveness, radioactivity or flammability; or
- its physical, chemical or infectious characteristics.

level 1 approval means an approval under the Act to carry out a level 1 environmentally relevant activity.

level 2 approval means an approval under the Act to carry out a level 2 environmentally relevant activity.

licence means a licence under the Act to carry out a level 1 environmentally relevant activity, and includes a provisional licence.

material environmental harm is environmental harm (other than environmental nuisance):

- that is not trivial or negligible in nature, extent or context; or
- that causes actual or potential loss or damage to property of an amount of, or amounts totalling, more than the threshold amount but less than the maximum amount; or
- that results in costs of more than the threshold amount but less than the maximum amount being incurred in taking appropriate action to:
 - prevent or minimise the harm; and
 - rehabilitate or restore the environment to its condition before the harm.

maximum amount means the threshold amount for serious environmental harm.

notifiable activity means an activity stated in schedule 3 of the *Environmental Protection Act 1994*.

release of a contaminant into the environment includes:

- to deposit, discharge, emit or disturb the contaminant; and
- to cause or allow the contaminant to be deposited, discharged, emitted or disturbed; and
- to fail to prevent the contaminant from being deposited, discharged, emitted or disturbed; and
- to allow the contaminant to escape; and
- to fail to prevent the contaminant from escaping.

serious environmental harm is environmental harm (other than environmental nuisance):

- that causes actual or potential harm to environmental values that is irreversible, of a high impact or widespread; or
- that causes actual or potential harm to environmental values of an area of high conservation value or special significance; or
- that causes actual or potential loss or damage to property of an amount of, or amounts totalling, more than the threshold amount; or
- that results in costs of more than the threshold amount being incurred in taking appropriate action to:
 - prevent or minimise the harm; and
 - rehabilitate or restore the environment to its condition before the harm.

threshold amount means \$5,000 or, if a greater amount is prescribed by regulation, the greater amount when referring to *material environmental harm*.

threshold amount means \$50,000 or, if a greater amount is prescribed by regulation, the greater amount when referring to *serious environmental harm*.

site investigation report means a report submitted to the administering authority about a site investigation of land for which particulars are recorded in the Environmental Management Register.

site management plan is a plan used to manage the land for which particulars are recorded in the Environmental Management Register because the land is contaminated land. A site management plan is used to manage the environmental harm that may be caused by the hazardous contaminant contaminating the land by applying conditions to the use or development of, or activities carried out on, the land.

standard criteria means:

- the principles of ecologically sustainable development as set out in the National Strategy for Ecologically Sustainable Development; and
- any applicable environmental protection policy; and
- any applicable Commonwealth, State or local government plans, standards, agreements or requirements; and
- any applicable environmental impact study, assessment or report; and
- the character, resilience and values of the receiving environment; and
- all submissions made by the applicant and interested parties; and
- the best practice environmental management for the activity under the authority, program, order or permit as they would relate to the type of activity or industry carried on under the authority, program or order; and
- the public interest; and
- any applicable site management plan; and
- any other material prescribed under a regulation.

unlawful environmental harm means an act or omission that causes serious or material environmental harm or an environmental nuisance unless it is authorised to be done or omitted to be done under:

- an environmental protection policy; or
- an environmental management program; or
- an environmental protection order; or
- an environmental authority; or
- a development condition of a development approval; or
- an emergency direction.

However, it is a defence to a charge of unlawfully causing environmental harm to prove:

- the harm happened while an activity (that is lawful apart from the Act) was being carried out; and
- the defendant complied with the general environmental duty either by complying with the relevant code of practice (if any) or in some other way.

waste means anything that is:

- left over, or an unwanted by-product, from an industrial, commercial, domestic or other activity;
- surplus to the industrial, commercial, domestic or other activity generating the waste.

A waste can be a gas, liquid, solid or energy or a combination of all of them and may be a waste whether or not it is of value.

wilfully means:

- intentionally; or
- recklessly, or
- with gross negligence.

Checklist

- Does the use of recycled wastewater cause unlawful environmental harm or environmental nuisance?
- Does the use of recycled wastewater result in the release of a prescribed contaminant?
- Does the use of recycled wastewater result in the contamination of land?
- Should the use of recycled wastewater be prescribed as an environmentally relevant activity?
- Should a code of practice be developed stating ways of achieving compliance with the general environmental duty when dealing with recycled wastewater?

Citation	ENVIRONMENTAL PROTECTION (AIR) POLICY 1997
Regulations	<i>Nil</i>
Reprint Number	1
Administered by	Environmental Protection Agency or a local government where an environmentally relevant activity has been devolved.
Relevance to Wastewater recycling	Wastewater reuse schemes may give rise to undesirable odours or other air quality problems, particularly in relation to the disposal of treated effluent and sludge.
Object of the Policy	<p>The object of the policy is to achieve the object of the <i>Environmental Protection Act 1994</i> in relation to Queensland's air environment (s.5). To achieve this object, the Policy:</p> <ul style="list-style-type: none"> • identifies environmental values to be enhanced or protected; and • specifies air quality indicators and goals to protect these environmental values; and • provides a framework for: <ul style="list-style-type: none"> - making consistent and fair decisions about the management of the air environment; and - involving the community in achieving air quality goals that best protect Queensland's air environment (s.6).

Obligations

Licences/Permits/Approvals

- Nil.

Requirements

- If the administering authority is deciding an application for an environmental authority, the amendment of a licence or level 1 approval, or the approval of a draft environmental management program, and the application concerns an activity that adversely affects, or may adversely affect, the environmental values, it must:
 - consider how the activity may affect the environmental values; and
 - evaluate the activity in relation to the following:
 - > any relevant program developed by the chief executive under the policy; and
 - > the air quality goals; and
 - > any relevant approved code of practice; and
 - > the standard criteria and other matters that must be considered under the Act; and
 - > the characteristics of the releases of contaminants to air from the relevant activity; and
 - > the order in which the applicant and affected persons started to occupy land at or near the relevant site; and
 - > the views of affected persons about releases of contaminants to the air environment from the relevant activity; and
 - > any other information or other matter concerning the effect of the relevant activity on the air environment; and
 - review potential conditions with the applicant (s.11).
- If in making a decision in relation to an environmental authority, the amendment of a licence or level 1 approval or the approval of a draft environmental management program, the administering authority considers it likely that a release will cause environmental harm, the administering authority may require the applicant to carry out air pollution dispersion modelling for the release or proposed release to:
 - assess predicted air quality against an air quality goal; or
 - assess the potential for reducing the impact on the air environment; or

- assess the cumulative effect of the releases (s.13).
- The administering authority must also consider requiring the applicant to monitor the releases and their impact.

Reporting

- Nil.

Enforcement

Offences & Penalties

- It is an offence to fail to comply with an abatement notice issued by the administering authority (s.19). Maximum penalty — 40 penalty units.

Other Enforcement Mechanisms

- If a person believes that a contaminant release from a place is an unreasonable release, the person may make a written complaint to the administering authority about the release (s.16). An authorised person must then investigate the complaint, unless the administering authority believes the complaint is vexatious (s.17).
- If the administering authority considers there are reasonable grounds for believing that an unreasonable release of contaminants to the air environment is being, or has been, made, the administering authority may give a notice to the person who release the contaminant (s.18).
- If the administering authority is satisfied the contaminant release is an unreasonable release, it may give an abatement notice to the person who released the contaminant (s.19).

Investigation Powers

- As per the *Environmental Protection Act 1994*.

Definitions

environmental values are the qualities of the air environment that are conducive to suitability for the life, health and wellbeing of humans.

air quality indicators are contaminants that may be present in the air environment. The levels of the contaminants in the air environment indicate the extent to which the environmental values have been enhanced or protected. Some air quality indicators are set out in schedule 1 of the Policy.

air quality goals are maximum levels for the air quality indicators as set out in schedule 1 of the Policy.

unreasonable release of a contaminant to the air environment, means the release of odours, dust, smoke or other atmospheric contaminants that:

- causes unlawful environmental harm; and
- is unreasonable having regard to the following matters:
 - its characteristics; and
 - its intrusiveness; and
 - other releases of contaminants at the place affected by the release; and
 - whether the effects of the release of the contaminant can be noticed; and
 - the order in which the person releasing the contaminant started to carry out the activity from which the release is made and persons affected by the release started to carry out other activities that may be affected by the release of the contaminant.

Checklist

- Does the use of recycled wastewater adversely affect the air environment?
- Does the operation of wastewater treatment facilities adversely affect the air environment?
- Is it desirable that a code of practice be developed stating the acceptable impact on the air environment of wastewater reuse schemes or the operation of wastewater treatment facilities to be considered by an administering authority when evaluating an application for an environmental authority or a draft environmental management program?

Citation	ENVIRONMENTAL PROTECTION (WATER) POLICY 1997
Regulations	<i>Nil</i>
Reprint Number	1
Administered by	Environmental Protection Agency or a local government where an environmentally relevant activity has been devolved.
Relevance to Wastewater recycling	The policy deals with environmental management decisions by the administering authority in relation to wastewater recycling, the release of wastewater on land, release of wastewater to a surface water, management of stormwater releases, release of wastewater to ground water, the construction of an artificial wetland for wastewater treatment in a natural wetland and an activity involving the use of natural biological controls in the treatment of wastewater. The policy also requires local government to develop environmental plans for managing sewerage systems, stormwater systems and water supply systems.
Objects of the Policy	<p>The purpose of this policy is to achieve the object of the <i>Environmental Protection Act 1994</i> in relation to Queensland waters (s.5). The purpose of this policy is to be achieved by providing a framework for:</p> <ul style="list-style-type: none"> • identifying environmental values for Queensland waters; and • deciding and stating water quality guidelines and objectives to enhance or protect the environmental values; and • making consistent and equitable decisions about Queensland waters that promote the efficient use of resources and best practice environmental management; and • involving the community through consultation and education, and promoting community responsibility (s.6).

Obligations

Licences/Permits/Approvals

- Nil

Requirements

Management of Activities

- If an administering authority is making an environmental management decision about an activity that may affect waters, it must consider using the following waste management evaluation procedure:
 - *Step 1* – evaluate waste prevention options and require the relevant person to implement appropriate waste prevention; and
 - *Step 2* – if waste prevention does not, or is not likely to, eliminate all wastewater evaluate wastewater treatment and wastewater recycling options and require the relevant person to implement appropriate treatment and recycling; and
 - *Step 3* – if wastewater treatment and wastewater recycling does not, or is not likely to, eliminate all wastewater - evaluate wastewater treatment and wastewater disposal options of release on land, release to sewer and release to a surface water and require the relevant person to implement appropriate treatment and disposal; and
 - *Step 4* – if wastewater treatment and wastewater disposal does not, or is not likely to, eliminate all wastewater - evaluate wastewater treatment and wastewater disposal to ground water and require the relevant person to implement appropriate treatment and disposal (s.15).
- If an administering authority is making an environmental management decision about an activity involving wastewater recycling, it must consider the water quality objectives for waters affected by the recycling and the maintenance of acceptable health risks (s.16).

- If an administering authority is making an environmental management decision about an activity involving the release of wastewater on land, it must consider the following:
 - the existing quality of waters that may be affected by the release and the water quality objectives for the waters; and
 - available land and wet weather storage; and
 - the cumulative effect of the release concerned and any other releases of contaminants to waters that could be affected by the release known to the administering authority; and
 - the need to protect soil and plants from damage; and
 - the maintenance of acceptable health risks; and
 - any applicable code of practice approved under the Act (s.17).
- To protect an environmental value, the administering authority may require the relevant person to release the wastewater to an artificial wetland for the removal of nutrients from the water.
- If an administering authority is making an environmental management decision about an activity involving the release of wastewater (other than contaminated stormwater) to a surface water, it must consider the following:
 - whether the size of the initial mixing zone will adversely affect an environmental value, especially biological integrity and suitability for recreational use; and
 - whether concentrations of contaminants in the initial mixing zone are acutely toxic to the biota; and
 - the existing quality of the surface water; and
 - the cumulative effect of the release concerned and any other releases or contaminants to the surface water known to the administering authority; and
 - future releases to the surface water known to the administering authority; and
 - the water quality objectives for waters outside the initial mixing zone (s.18).
- To protect an environmental value, the administering authority may require the relevant person to meet a minimum initial dilution level under stated tidal or flow conditions, apply a limit to the size of the initial mixing zone, use an alternative outfall location or release wastewater only during stated parts of the tide or only above stated freshwater flows.
- If an administering authority is making an environmental management decision about an activity involving the release of contaminated stormwater to a roadside gutter, a stormwater drain or a surface water, it must decide whether the management of stormwater releases from the activity is adequate to prevent or minimise environmental harm in waters affected by the release. In making its decision, the administering authority must consider the following:
 - the existing quality of a water that may be affected by the release and the water quality objectives for the water; and
 - the cumulative effect of the release in question and any other releases of contaminants to the water known to the administering authority; and
 - the technology, management and nature of processes being, or to be, used in carrying out the activity; and
 - any relevant urban stormwater quality management plan; and
 - the topography of the locality and local climatic conditions; and
 - if the activity involves exposing or disturbing soil - the soil type, its characteristics and the way it is managed (s.19).
- If the administering authority decides the management of stormwater releases from the activity is not likely to be adequate to prevent or minimise environmental harm, the administering authority may require the relevant person to implement waste prevention measures or install control or treatment measures.
- If an administering authority is making an environmental management decision about an activity involving the direct release of wastewater to ground water, it must consider the following:
 - whether the size of the attenuation zone will adversely affect an environmental value, especially in the draw-down zones of any bores used to obtain water for irrigation, stock or supply for drinking; and
 - the existing quality of the ground water; and
 - the cumulative effect of the release concerned and any other releases to the ground water known to the administering authority; and
 - the water quality objectives for waters outside the attenuation zone (s.20).

- The administering authority may decide to authorise the release of wastewater to a ground water that results in the water quality objectives for waters outside the attenuation zone not being met only if:
 - the release is to a confined aquifer; and
 - the existing quality of the ground water is extremely poor; and
 - the ground water is a long way from the surface; and
 - there is no foreseeable environmental value for, or commercial use of, the ground water; and
 - there is no likely ecological link with another water.
- To protect an environmental value, the administering authority may require a limit to the size of the attenuation zone.
- If an administering authority is making an environmental management decision about an activity involving the incidental release of wastewater to ground water, it must consider the following:
 - the existing quality of, and the water quality objectives for, the ground water or a surface water likely to be affected by the release; and
 - the cumulative effect of the release concerned and any other releases of wastewater to the ground water known to the administering authority; and
 - requiring the relevant person to minimise or prevent infiltration of wastewater to the ground water (s.21).
- If an administering authority is making an environmental management decision about an activity involving the construction of an artificial wetland for wastewater treatment in a natural wetland, it must decide whether the existing ecological values, or the ecological values likely to exist after rehabilitation, of the natural wetland are so significant that the artificial wetland should not be constructed in the natural wetland. In making its decision, the administering authority must consider the following:
 - whether the natural wetland is of local, regional or national importance using wetlands criteria given in the ANCA Directory; and
 - whether the natural wetland no longer functions as a wetland because its ecological values have been degraded; and
 - whether the degradation could be reversed by cost-effective remedial or rehabilitation measures; and
 - potential improvements to downstream water quality through building the artificial wetland; and
 - whether there is an alternative site for construction of the artificial wetland (s.22).
- If an administering authority is making an environmental management decision about an activity involving the use of natural biological controls in the treatment of wastewater, it must consider:
 - any safety information available about the controls and the recommended dose levels for the controls; and
 - the likely persistence and effect of the controls on the environment; and
 - whether there are any potential pathogens in the controls (s.23).
- If an administering authority is making an environmental management decision about an activity involving the release of wastewater on land or to a water, it must consider requiring the relevant person to monitor the wastewater releases. In making its decision, the administering authority must consider the following:
 - whether monitoring is needed:
 - > to decide if a condition of an environmental authority or environmental management program or an environmental protection order is being complied with; or
 - > to decide if a system to prevent contamination of land or waters by wastewater is required or an existing system is functioning properly; or
 - > because of the risk, and likely consequences, of the system failing; and
 - the variability of wastewater released from the activity; and
 - the protocols for monitoring the releases; and
 - requiring the relevant person to use continuous monitoring equipment where it is reasonable and practicable (s.26).
- If an administering authority is making an environmental management decision about an activity involving the release, or potential release, of wastewater on land or to a water, it must consider requiring the relevant person to carry out impact monitoring of the effect of the wastewater releases (s.27). In making its decision, the administering authority must:
 - consider the protocols for monitoring the land or water to which the wastewater is released; and

- take into account impact monitoring is generally only required:
 - > for large or hazardous activities with potential for causing significant environmental harm; or
 - > to measure the size of the initial mixing zone or attenuation zone from a large or complicated release; or
 - > to verify the conclusions of an environmental impact assessment, study or report; or
 - > to decide future disposal strategies; or
 - > if there is concern over levels of a particular contaminant in a water and there are known activities that release that contaminant to the water.

Environmental Plans

- A local government that operates a sewerage system must develop and implement an environmental plan about sewerage management that minimises unnecessary flows entering the system (s.40). The local government must consider including in its plan alternatives to expansion or remediation of an existing system and construction of a new system, including for example, domestic on-site wastewater treatment systems and recycling or disposal of wastewater. In developing the plan the local government must consider the water quality objectives for the water into which wastewater may be released and the maintenance of acceptable health risks.
- A local government that operates a sewerage system must develop and implement an environmental plan about trade waste management that controls trade wastes entering the system (s.41). The local government must consider including in its plan:
 - requirements for waste prevention, recycling and treatment measures before the release of trade waste to a sewer may be authorised; and
 - provisions about the effect of trade waste on the recycling of wastewater and sludge.
- A local government that has an urban stormwater system must develop and implement an environmental plan about urban stormwater quality management that improves the quality of stormwater in a way that is consistent with the water quality objectives for water affected by the system (s.42). The local government must consider including in its plan, amongst other measures, planning and design approaches for its stormwater system that have regard to making use of stormwater for recycling and water conservation.
- A local government that operates a water supply system must develop and implement an environmental plan about water conservation that improves water use efficiency in the system (s.43). The local government must consider including in its plans, amongst other measures, the use of wastewater recycling. In developing its plan, the local government must consider the water quality objectives for the water into which wastewater may be released and the maintenance of acceptable health risks.
- Before 5 June 2002 the local government or chief executive of the Department of Natural Resources must develop, and start implementing, at least one environmental plan for each matter (s.36).
- The local government or chief executive of the Department of Natural Resources must regularly review the performance of the plans, including their economic and social impacts (s.37).

Reporting

- A local government that is required to develop and implement environmental plans must give the chief executive:
 - a report on the development and implementation of environmental plans before 5 June 2000; and
 - after the local government has started implementing an environmental plan, a report on the plan's implementation within 2 months after the end of each financial year (s.39(1)).
- The requirement does not apply to a local government that reports to the chief executive of the Department of Natural Resources about another plan and notifies the chief executive of the Environmental Protection Agency before 5 June 2000 of its intention to implement the other plan to achieve compliance with the Policy.
- The chief executive of the Department of Natural Resources must give the chief executive of the Environmental Protection Agency a report:
 - about the development and implementation of its environmental plans before 5 June 2000; and
 - after the chief executive has started implementing an environmental plan, a report on the plan's implementation 2 months after the end of each financial year (s.39(3)).

Enforcement

Offences & Penalties

- It is an offence to release solid or liquid waste from an on-site domestic wastewater treatment system, or any by-product or waste from a manufacturing process that has a pH less than 6 or greater than 9, into a roadside gutter, stormwater drain or a water or in a place where it could reasonably be expected to move or be washed into a roadside gutter, stormwater drain or a water (s.31). Maximum penalty - 40 penalty units. However, a person does not commit an offence if the release was authorised under an environmental authority, environmental management program, environmental protection order or emergency direction. It is also a defence to the charge for the person to prove that the deposit or release happened while carrying out a lawful activity and the person complied with the general environmental duty either by complying with the relevant code of practice (if any) or in some other way.
- It is an offence for a person to:
 - release stormwater run-off into a roadside gutter, stormwater drain or a water that results in the build-up of sand, silt or mud in the gutter, drain or water; or
 - deposit sand, silt or mud in a roadside gutter, stormwater drain or a water or in a place where it could reasonably be expected to move or be washed into a roadside gutter, stormwater drain or water and result in a build-up of sand, silt or mud in the gutter, drain or water (s.32).

Maximum penalty - 20 penalty units. However, a person does not commit an offence if the release or deposit was authorised under an environmental authority, environmental management program, environmental protection order or emergency direction. It is also a defence to the charge for the person to prove that the release or deposit happened while carrying out a lawful activity and the person complied with the general environmental duty either by complying with the relevant code of practice (if any) or in some other way.

Other Enforcement Mechanisms

- If an administering authority is authorised to require a person to take certain action, the administering authority may require the person to take the action by:
 - for an environmental management decision about an environmental authority - imposing a condition on the authority; or
 - for an environmental management decision about an environmental management program - imposing a condition on the approval of the program; or
 - for an environmental management decision about an environmental protection order - including the requirement in the order (s.14).

Investigation Powers

- As per the *Environmental Protection Act 1994*.

Definitions

ANCA Directory means the Directory of Important Wetlands in Australia, 2nd edition published by the Australian Nature Conservation Agency in 1996.

attenuation zone means the area around a release to ground water in which the concentration of contaminants in the release is reduced to ambient levels through physico-chemical and microbiological processes.

AWQ Guidelines means the Australian Water Quality Guidelines for Fresh and Marine Waters published by ANZECC in 1992.

biological integrity of a water means the water's ability to support and maintain a balanced, integrative, adaptive community of organisms having a species composition, diversity and functional organisation comparable to that of the natural habitat of the locality in which the water is situated.

contaminated stormwater means stormwater that contains a contaminant.

down draw zone of a bore means the region in which there is a difference between the observed water level during pumping and the water level when there is no pumping.

environmental management decision means a decision by an administering authority about an environmental authority, environmental management program or environmental protection order for an environmentally relevant activity or other activity.

environmental value of waters to be enhanced or protected under the policy are, unless prescribed for a specific place in schedule 1 of the policy:

- if the water is a pristine water - biological integrity of a pristine aquatic ecosystem, or if it is not a pristine water - biological integrity of a modified aquatic ecosystem; and

- suitability for recreational use; and
- suitability for minimal treatment before supply as drinking water; and
- suitability for agricultural use; and
- suitability for industrial use.

Environmental values are protected if the measures for all indicators do not exceed the water quality guidelines stated for the indicators.

impact monitoring of the release of a contaminant into a water means measuring the effect of the release on the water's quality.

incidental release of wastewater to ground water means the release of wastewater into ground waters by infiltration that happens incidental to carrying out an activity.

indicator for an environmental value is a property that is able to be measured or decided in a quantitative way. Site specific documents, the AWQ guidelines and documents published by a recognised entity are used to decide the indicators for an environmental value for a water.

initial mixing zone means an area where wastewater mixes rapidly with surface water because of the momentum or buoyancy of the wastewater and the turbulence of the surface water.

minimal treatment of water means coarse screening or coarse screening and disinfection.

modified aquatic ecosystem means an aquatic ecosystem that is, or has been, subject to human interference through releases (whether direct or indirect) into a water forming part of the ecosystem or activities in the water's catchment area.

natural biological controls means naturally occurring bacteria, fungi or micro-organisms that are cultured and added to wastes in high numbers to break down contaminants.

NWQM Strategy means the National Water Quality Management Strategy developed by ANZECC and ARMCANZ.

pristine aquatic ecosystem means an aquatic ecosystem that has not been, or is not, subject to human interference through releases (whether direct or indirect) into a water forming part of the ecosystem or activities in the water's catchment area.

protocol is a procedure to be followed in making tests and measurements, taking samples, preserving and storing samples, performing analyses on samples or performing statistical analyses of the results of sample analyses and interpreting the results. For this policy, the following documents are used to decide protocols:

- the Water Quality Sampling Manual, 2nd edition, February 1995 published by the department; and
- the AWQ Guidelines; and
- Australian Standards; and
- documents published by a recognised entity.

recognised entity means:

- the department; or
- an environmental protection agency of the Commonwealth or a State; or
- Australian and New Zealand Environment and Conservation Council; or
- Agricultural and Resource Management Council of Australia and New Zealand; or
- the Government Chemical Laboratory; or
- the department by which the *Water Resources Act 1989* is administered; or
- the department by which the *Fisheries Act 1994* is administered; or
- the United States Environmental Protection Agency or another environmental protection agency of a national government; or
- a co-operative research centre; or
- Commonwealth Scientific and Industrial Research Organisation; or
- an Australian university.

recycling of wastewater means:

- reusing the wastewater in the process that generated it; or
- reprocessing the wastewater to develop a new product; or
- using the wastewater (whether on or off the site where it is generated).

relevant person for an environmental management decision means:

- for a decision about an environmental authority - the applicant for, or the holder of, the authority; or
- for a decision about an environmental management program - the person or public authority that submitted the program for approval or the holder of the approval of the program; or
- for a decision about an environmental protection order - the proposed recipient, or recipient, of the order.

site specific document means a document that contains specific information about a water, or part of a water, and is recognised by the relevant administering authority as having appropriate scientific authority.

waste prevention means the adoption of practices or processes that avoid generating waste or reduce the quantity of waste requiring subsequent treatment, recycling or disposal.

wastewater means a liquid waste, and includes contaminated stormwater.

water quality guidelines are numerical concentration levels or statements for indicators that protect a stated environmental value. Site specific documents, the AWQ guidelines and documents published by a recognised entity are used to decide the water quality guidelines for an environmental value for a water.

water quality objectives are, unless specifically prescribed in schedule 1 of the Policy, the set of water quality guidelines for all indicators that will protect all environmental values for the water. However, the water quality objectives do not apply to:

- drinking water in a domestic water supply system; and
- wastewater in storage including for example a sewerage lagoon, mine tailings dam, irrigation tailwater, dam and piggery or dairy wastewater pond; and
- water in a pond used for aquaculture; and
- water within an initial mixing zone or attenuation zone.

Checklist

- Are the provisions of the policy taken into account by an administering authority when making an environmental management decision relating to wastewater recycling?
- Are local governments developing the relevant environmental plans?
- Is it desirable that a code of practice be developed for consideration by an administering authority when making an environmental management decision about an activity involving the release of wastewater on land?

Citation	FISHERIES ACT 1994
Regulations	<i>Fisheries Regulation 1995</i>
Reprint Number	2
Administered by	Minister for Primary Industries
Relevance to Wastewater recycling	The Act regulates activities which may adversely impact upon the integrity of fish habitats and the quality of fish stocks. The Act is therefore relevant to wastewater recycling as the potential exists for the nutrients contained within recycled wastewater to adversely impact upon the integrity of fish habitats when used in coastal areas or in close proximity to river systems.
Objects of the Act	<p>The objectives of the Act include:</p> <ul style="list-style-type: none"> ensuring fisheries resources are used in an ecologically sustainable way; and achieving the optimum community, economic and other benefits obtainable from fisheries resources; and ensuring access to fisheries resources is fair (s.3).
Obligations	
<p>Licences/Permits/Approvals</p> <ul style="list-style-type: none"> Nil. <p>Requirements</p> <ul style="list-style-type: none"> Where a noxious substance is on land, in waters, on marine plants or in a fish habitat and it appears to the chief executive: <ul style="list-style-type: none"> that the substance has had, or may have, an adverse effect on the quality or productive capacity of a fishery or fish stocks and that it is necessary or desirable for action to be taken about the substance to protect or restore the quality or productive capacity of the fishery or fish stocks; or that the substance has had, or may have, an adverse effect on the quality or integrity of a fish habitat and that it is necessary or desirable for action to be taken about the substance to protect or restore the quality or integrity of the fish habitat, <p>the chief executive may require the person who the chief executive suspects on reasonable grounds is responsible for the presence of the substance to take specified action about the substance (s.125).</p> <p>Reporting</p> <ul style="list-style-type: none"> Nil. 	
Enforcement	
<p>Offences & Penalties</p> <ul style="list-style-type: none"> It is an offence to fail to comply with a notice issued by the chief executive under section 125 (Notice to restore fish habitat etc) of the Act in relation to a noxious substance on land, in waters, on marine plants or in a fish habitat unless the person has a reasonable excuse for not doing so. Maximum penalty — 2,000 penalty units. <p>Other Enforcement Mechanisms</p> <ul style="list-style-type: none"> If a person does not comply with a notice issued by the chief executive in relation to a noxious substance on land, in waters, on marine plants or in a fish habitat, the chief executive may take any action on any land or in any waters that the chief executive considers reasonably necessary, with any costs reasonably incurred by the chief executive in taking such action being a debt payable to the State by the person (s.125). <p>Investigation Powers</p> <ul style="list-style-type: none"> Inspectors have a wide range of powers under Part 8 of the Act, including the power of entry, the power to search any place entered and the power to seize evidence. 	

Definitions

fish means an animal (whether living or dead) of a species that throughout its life cycle usually lives in water (whether freshwater or saltwater), in or on foreshores or in or on land under water. The term includes:

- prawns, crayfish, rock lobsters, crabs and other crustaceans; and
- scallops, oysters, pearl oysters and other molluscs; and
- sponges, annelid worms, beche-de-mer and other holothurians, sea snakes, marine mammals and turtles; and
- trochus and green snails; and
- the spat, spawn and eggs of fish; and
- any part of fish or of spat, spawn or eggs of fish; and
- treated fish, including treated spat, spawn and eggs of fish; and
- coral, coral limestone, shell grit or star sand; and
- freshwater or saltwater products declared under a regulation to be fish.

However, **fish** does not include crocodiles, protected animals under the *Nature Conservation Act 1992* or animals prescribed under a regulation not to be fish.

fish habitat includes land, waters and plants associated with the life cycle of fish and includes land and waters not presently occupied by fisheries resources.

fisheries resources includes fish and marine plants.

fishery includes activities by way of fishing, including, for example, activities specified by reference to all or any of the following:

- a species of fish;
- a type of fish by reference to sex, size or age or another characteristic;
- an area;
- a way of fishing;
- a type of boat;
- a class of person;
- the purpose of an activity;
- the effect of the activity on a fish habitat, whether or not the activity involves fishing;
- anything else prescribed under a regulation.

marine plant includes the following:

- a plant (a tidal plant) that usually grows on, or adjacent to, tidal land, whether it is living, dead, standing or fallen;
- material of a tidal plant, or other plant material on tidal land; or
- a plant, or material of a plant, prescribed under a regulation or management plan to be a marine plant.

noxious substance means anything that:

- is harmful, or produces conditions that are harmful, to fisheries resources or fish habitats; or
- is prescribed under a regulation or management plan to be a noxious substance.

Checklist

- Does the use of recycled wastewater in coastal areas or in close proximity to river systems adversely impact upon the quality or productive capacity of a fishery?
- Does the use of recycled wastewater in coastal areas or in close proximity to river systems adversely impact upon the quality or integrity of a fish habitat?

Citation	FOOD STANDARDS AUSTRALIA NEW ZEALAND ACT 1991
Regulations	<i>Food Standards Australia New Zealand Regulations 1994</i>
Reprint Number	3
Administered by	Minister for Health
Relevance to Wastewater recycling	The Act regulates the sale and preparation of goods which may be dangerous to health. The Act is therefore relevant to wastewater recycling as it is necessary to ensure that plants cultivated on land upon which recycled wastewater is used will not be dangerous to the health of persons who may consume the plants as food.
Objects of the Act	The object of the Act is to consolidate and amend the law relating to the preparation and sale of food, to make provision for securing the wholesomeness and purity of and fixing standards for food and for other purposes (Long Title).
Obligations	
Licences/Permits/Approvals	
<ul style="list-style-type: none"> Approval of the chief health officer is required before cultivating, taking, harvesting or otherwise obtaining food, or food of a specified class or description, from an area for which an order has been given by the chief health officer prohibiting such dealings with food in the area (s.20). 	
Requirements	
<ul style="list-style-type: none"> A person must not sell food that is unfit for human consumption, adulterated, damaged, deteriorated or perished (s.9). A person must not prepare for sale (s.10(1)) or package for sale (s.11(1)) food that is unfit for human consumption, adulterated, damaged, deteriorated or perished. A person who prepares for sale (s.10(2)) or packages for sale (s.11(2)) food for which there is a prescribed standard must ensure that the food complies with the standard. Section 5 of the Regulation adopts the standards contained in the Food Standards Code. A person who sells food must ensure that the food complies with the standard prescribed for the food demanded by the purchaser (s.12(2)). Section 5 of the Regulation adopts the standards contained in the Food Standards Code. 	
Reporting	
<ul style="list-style-type: none"> Nil. 	
Enforcement	
Offences & Penalties	
<ul style="list-style-type: none"> It is an offence to breach section 9 (Prohibition on sale of certain food) of the Act. Maximum penalty — 50 penalty units. It is an offence to breach section 10(1) (Preparation of food for sale) of the Act. Maximum penalty — 100 penalty units. It is an offence to breach section 11(1) (Packaging of food for sale) of the Act. Maximum penalty — 50 penalty units. It is an offence to breach section 10(1) (Preparation of standard food for sale) of the Act. Maximum penalty — 60 penalty units. It is an offence to breach section 11(2) (Packaging of standard food for sale) of the Act. Maximum penalty — 40 penalty units. It is an offence to breach section 12(2) (Sale of standard food) of the Act. Maximum penalty — 40 penalty units. It is an offence to breach section 20 (Prohibition of cultivation of food in certain circumstances) of the Act. Maximum penalty — 100 penalty units. It is an offence to contravene or fail to comply with a provision of the Act (s.44(1)). Maximum penalty where no other penalty specified — 40 penalty units. 	

- It is an offence to fail to comply with the directions or requirements of a person acting under the authority of the Act or do that which a person acting under the authority of the Act forbids (s.44(2)). Maximum penalty where no other penalty specified — 40 penalty units.
- Where, on conviction for an offence against the Act in respect of food, the court is of the opinion that the food has been so adulterated as to be injurious to health, or the offence was committed wilfully or by the culpable negligence of the defendant, the defendant is liable to a penalty of 100 penalty units which, in the court's discretion, may be in addition to or in substitution for any other penalty imposed by the Act for the offence in question (s.44(4)).

Other Enforcement Mechanisms

- The chief health officer may, by order in writing, prohibit the cultivation, taking, harvesting or otherwise obtaining of food, or food of a specified class or description, from an area specified in the order where the chief health officer is of the opinion that food generally, or food of a specified class or description, if cultivated, taken, harvested or otherwise obtained in or from that area, may be dangerous or injurious to persons who may consume that food (s.20).
- The chief health officer may, upon being notified that a prescribed pathogen has been isolated in food, give directions to a person for the purpose of identifying the source of and controlling the danger caused by the pathogen (Regulation, s.16).

Investigation Powers

- Authorised officers have a wide range of powers of investigation including the power of entry, and once a place has been entered, the power to make such investigations and inquiries as are necessary to ascertain whether the Act is being complied with (s.28).

Definitions

adulterated in relation to food means:

- it is labelled or otherwise represented as being food of a particular class or description and contains or is mixed or diluted with a substance in a quantity that diminishes in any manner any of its properties as compared with such food in a pure state and an undeteriorated condition; or
- it contains a substance prescribed as prohibited generally or in relation to that food; or
- the regulations specify that food generally or food of the class or description concerned is to contain no more than a specified quantity or proportion of particular substance and the food contains more than that quantity or proportion; or
- it is injurious to health, dangerous or offensive; or
- a package or thing included in a package or anything or matter with which food comes into contact consists wholly or partly of a substance that may render the food injurious to health, dangerous or offensive; or
- it contains a foreign substance or matter.

food means a substance or matter ordinarily consumed or intended for human consumption, and includes:

- drink; and
- chewing gum; and
- any ingredient, food additive or other substance that enters into or is capable of entering into or is used in the composition or preparation of food; and
- another substance declared under a regulation to be food;

but does not include a substance used only as a drug or declared under a regulation not to be food.

Food Standards Code is the Food Standards Code within the meaning given by the *Australia New Zealand Food Authority Act 1991*.

prepare includes manufacture, process or treat.

prescribed pathogen means *Campylobacter jejuni*, *Clostridium botulinum*, *Listeria monocytogenes*, *Yersinia enterocolitica*, *Salmonella* (any species) and *Shigella* (any species).

Checklist

- Are mechanisms in place to ensure that the residue levels in or on food obtained from land upon which recycled wastewater is used comply with the standards stated in the *Food Standards Code*?

Citation	FORESTRY ACT 1959
Regulations	<i>Forestry Regulation 1998</i>
Reprint Number	3
Administered by	Minister for Environment and Heritage, Minister for Natural Resources, Minister for Primary Industries
Relevance to Wastewater recycling	<p>The Act regulates activities within State forests and timber reserves. Of particular relevance to wastewater recycling, the Act contains provisions dealing with the prevention of:</p> <ul style="list-style-type: none"> • pollution arising from depositing damaging substances into waterways in State forests or timber reserves; and • interference with forest products, earth or soil in any Crown land or land reserved or dedicated to public purposes.
Objects of the Act	The object of the Act is to provide for forest reservations, the management, silvicultural treatment and protection of State forests, and the sale and disposal of forest products and quarry materials, the property of the crown on State forests, timber reserves and on other lands, and for other purposes (Long Title).

Obligations

Licences/Permits/Approvals

- A permit is required to take water from a lake, watercourse or natural water storage in a State forest or timber reserve, other than for immediate domestic use (Regulation, s.13(1)).
- An authority under the *Forestry Act 1959* or another Act is required in order to interfere with any forest products, earth or soil in any Crown land or land reserved or dedicated to public purposes (s.54).

Requirements

- Effluent, grease, oil, waste or another damaging substance must not be deposited or discharged into a lake, watercourse or natural water storage supply or storage facility which is located in a State forest or timber reserve (Regulation, s.13(2)).
- A water supply or storage facility must not be damaged or interfered with in a State forest or timber reserve (Regulation, s.13(2)).
- Regulations may be made for the purpose of the prevention of pollution arising from the depositing or discharge of effluent on State forests or timber reserves (s.97).

Reporting

- Nil.

Enforcement

Offences & Penalties

- It is an offence to use or contaminate water in a State forest or timber reserve in contravention of section 13 of the Regulation. Maximum penalty — 10 penalty units.
- It is an offence to interfere with a forest product, earth or soil in contravention of section 54 of the Act. Maximum penalty — 1,000 penalty units for a first offence and 3,000 penalty units for a subsequent offence.
- It is an offence to fail to comply with any provision, condition or restriction of a lease, agreement, contract, permit, licence or other authority granted or made under the Act (s.60).
- It is an offence to contravene or fail to comply with any provision of the Act (s.88). Maximum penalty - if no specific penalty is provided for the offence, 100 penalty units for a first offence and 200 penalty units for a second or subsequent offence against the same section or that is similar to the first or a previous offence (s.88(1)).

Other Enforcement Mechanisms

- A permit, licence, lease, other authority, agreement or contract entered into under the Act may be suspended, cancelled or forfeited by the Corporation where the holder fails to comply with any provision of the Act or a condition of the permit, licence, lease, other authority, agreement or contract (s.58).
- Any person guilty of an offence against any provision of the Act relating to State forests or timber reserves, or any forest products the property of the Crown, will be liable for all loss and all damage caused by that offence (s.88(2A)).

Investigation Powers

- Any person performing duties under the Act may enter any land or waters for the purpose of inspecting any forest products or for giving effect to any of the provisions of the Act, and upon entry do anything necessary for the purposes of the Act (s.81).

Definitions

forest products means all vegetable growth and material of vegetable origin whether living or dead and whether standing or fallen, including timber, and, in relation to a State forest, timber reserve or forest entitlement area the term includes:

- honey;
- all form of indigenous animal life;
- any nest, bower, shelter or structure of any form of indigenous animal life;
- fossil remains;
- Aboriginal remains, artefacts or handicraft of Aboriginal origin;
- relics;
- quarry material,

but does not include grasses (indigenous or introduced) or crops grown on a Crown holding by the lessee or by the licensee or on a forest entitlement area by the lessee or owner.

interfere with, used in relation to any forest products, earth, soil, or quarry material, includes destroy, get, damage, mark, move, use, or in any way interfere with.

State forest means land set apart and declared or deemed to be set apart under the Act as a State forest.

timber reserve means land set apart and declared or deemed to be set apart and declared under the Act as a timber reserve.

watercourse includes any river, stream or creek (whether subject to tidal influence or not) in which water flows in a natural channel, either permanently, intermittently, or occasionally.

Checklist

- Are mechanisms in place to ensure that the use of recycled wastewater will not lead to the deposit or discharge of effluent, grease, oil, waste or another damaging substance into a water body located within a State forest or reserve?
- Are mechanisms in place to ensure that the use of recycled wastewater will not unlawfully interfere with any forest product, earth or soil in Crown land or land reserved or dedicated to public purposes?
- Is it necessary to draft a regulation dealing specifically with the discharge of effluent into State forests or timber reserves?

Citation	HEALTH ACT 1937
Regulations	<i>Health Regulation 1996</i>
Reprint Number	3
Administered by	Minister for Health and Local Government
Relevance to Wastewater recycling	<p>The Act deals with the regulation of the following issues which are of relevance to wastewater recycling:</p> <ul style="list-style-type: none"> • disease; • nuisance and offensive trades; • sewers, stormwater drains and sanitary conveniences; • camping grounds; • the use of lead in water carriage and storage devices; • mosquitos; and • vermin.
Objects of the Act	The object of the Act is to amend and consolidate the laws relating to public health (Long Title).

Obligations

Licences/Permits/Approvals

- Local government consent or specific statutory provision is required in order to establish or continue any noxious or offensive trade, business or manufacture (s.85).

Requirements

Diseases

- The chief health officer may require a local government to do anything for the purpose of preventing the outbreak or occurrence of a notifiable disease within its area (s.34A).
- The local government:
 - may, upon the report of its medical officer of health or any medical practitioner; or
 - must, if required by the chief executive,

direct the owner or occupier of any premises situated within its area to cleanse and disinfect the premises. If a notice to cleanse and disinfect is not complied with, the local government must cleanse and disinfect the premises, and may recover the expenses incurred in so doing from the owner or occupier in default (s.38).

- The local government may, and when required by the chief executive must, direct the destruction of any building or structure infected with any notifiable disease which has been certified by its medical officer of health to be incapable of proper disinfection (s.39).

Nuisance

- If local government is satisfied of the existence of a nuisance, the local government must serve an abatement notice on the person who caused the nuisance, or the owner or occupier of the land on which the nuisance exists (s.79).
- A person must not carry on a trade, business or manufacture which is a nuisance or injurious to the health of any of the inhabitants of the area (s.86).
- The owner or occupier of a premises must not:
 - let any waste or stagnant water remain in any place for 24 hours after receiving written notice from the local government to remove the waste or stagnant water; or
 - allow the contents of any sanitary convenience to overflow; or
 - allow any wastewater to run from any premises so as to cause an offensive smell; or

- let any rubbish, filth, or unwholesome matter or thing to collect on the land (s.87).
- The occupier or owner of land must remove any accumulation of manure, dung, soil, filth or other offensive matter if required to do so by a local government (s.89).

Lead

- A building must not have anything used for the purpose of carrying water from its roof or guttering to a tank constructed of lead metal sheet or sheets coated with lead, or containing or coated with any alloy containing more than a proportion of lead prescribed by local government (s.129B).

Mosquito Control

- A person must not construct, install or place on premises a water holding or storage receptacle unless the receptacle is provided with:
 - mosquito-proof screens of stated specifications; or
 - flap valves at every opening of the receptacle; or
 - where the receptacle has a manhole, the diameter of the manhole must not be more than 40cm; or
 - other approved means for preventing the ingress or egress of mosquitos (Regulation, s.69).
- The occupier of premises must at all times ensure that any pool, trough, fountain, barrel, trench or other like place or receptacle which ordinarily or occasionally contains water or other liquid is prevented from serving as a breeding place or harbourage for mosquitos by one or more of the following methods:
 - by keeping the liquid covered or treated with kerosene or other suitable oil or substance; or
 - by keeping the liquid stocked with mosquito-larvae destroying fish; or
 - by covering all openings with mosquito-proof screens or flap valves at every opening of the receptacle; or
 - by completely drawing off or emptying all water or other liquids from the receptacle and allowing the interior to dry, or thoroughly scrubbing all parts of the interior of the receptacle after emptying, at least once every seven days (Regulation, s.70).
- Where there is a pond, pool, swamp or other accumulation of water or other liquid on a premise, permanent or otherwise, which is likely to serve as a breeding place or harbourage for mosquitos if it is not drained or filled in, the owner of the premises must effectively drain or fully fill in the area (Regulation, s.71(1)).
- The owner of the premises must:
 - ensure that all drains are at all times properly maintained and kept free from obstruction; and
 - maintain the surface of the land at appropriate levels so that the liquid does not at any time remain on any portion of the premises and flows into the drains without obstruction (Regulation, s.71(2)).
- The occupier of any premises must:
 - not permit or allow to remain on the premises a receptacle which by collecting rain water or other liquid is likely to serve as a breeding place or harbourage for mosquitos; or
 - ensure that all open drains and channels on the premises are kept free from obstruction to prevent them holding water or other liquid that is likely to serve as a breeding place or harbourage for mosquitos (Regulation, s.72).
- The owner of the premises must ensure that every gutter, drain, roof, spouting, roof gutter and other like channel is properly maintained and kept free from obstruction, so as to prevent water or other liquid remaining in it and serving as a breeding place or harbourage for mosquitos (Regulation, s.73).
- The local government is required:
 - for premises owned or occupied by it, or under its management and control, to take the measures prescribed for owners and occupiers of premises; and
 - for roads, drains and sewers, including disused drains and sewers, within its area to take such measures as are reasonably practicable, and specified in a notice given to it by the chief health officer, to prevent any road, drain or sewer serving as a breeding place or harbourage for mosquitos (Regulation, s.74).

Vermin Control

- The owner of any place must:
 - ensure all parts of all buildings and other structures are constructed and maintained so as to prevent the entry of vermin (Regulation, s.183(a)); and
 - ensure every hole or opening in any part of any building or structure is securely covered with a suitable vermin-proof material (Regulation, s.183(b)); and

- ensure every retaining wall, embankment, improvement or work of any kind or formation, is constructed and maintained so as to not attract or provide shelter for, and not be likely to attract or provide shelter for, vermin (Regulation, s.183(c)); and
- trap or otherwise protect every covered drain, sewer, pipe, covered conduit or covered channel within any place, such as to prevent the ingress or egress of vermin (Regulation, s.185(1)); and
- remove, block or otherwise deal with every disused covered drain, sewer, pipe, covered conduit or covered channel, such as to prevent the ingress or egress of vermin (Regulation, s.185(2)).
- The occupier of any place must:
 - not have, let or permit to remain any thing on that place which is in such condition or is kept or stored so that it attracts or provides shelter for, or is likely to attract or provide shelter for, vermin (Regulation, s.184); and
 - ensure everything on that place which is or may be a source of food for vermin is protected so as to effectively prevent access by vermin (Regulation, s.187); and
 - ensure every supply or collection of water on that place is protected as far as is practicable so as to effectively prevent access by vermin (Regulation, s.187); and
 - not have, let or permit to remain on that place any refuse unless the refuse is stored in accordance with the *Environmental Protection (Interim Waste) Regulation 1996* (Regulation, s.188); and
 - on becoming aware of the presence of vermin in that place, immediately notify the relevant local government in writing and ensure that every thing which is infested with vermin is treated as directed by the local government (Regulation, s.189).
- The local government is required:
 - for premises owned or occupied by it, or under its management and control, to take the measures prescribed for owners and occupiers of premises; and
 - for roads, drains and sewers, including disused drains and sewers, within its area to take such measures as are reasonably practicable and specified in a notice given to it by the chief health officer, to prevent any road, drain or sewer serving as a shelter or attraction for vermin (Regulation, s.190).

Sewers, Stormwater Drains and Sanitary Conveniences

- The local government must ensure that all sewers, stormwater drains and sanitary conveniences within its area are constructed and kept so as not to be a nuisance or injurious or prejudicial to health (s.93).
- If a local government suspects that a sewer, stormwater drain or sanitary convenience is creating a nuisance or is injurious or prejudicial to health, the local government may examine the sewer, stormwater drain or sanitary convenience and require the owner to rectify any fault found (s.94). If the fault is not rectified, the local government may carry out the work necessary and recover the costs incurred in doing so from the owner or occupier.
- The Governor-in-Council may, by order, prohibit:
 - the carrying-off of sewage or stormwater drainage into:
 - > a watercourse, stream or canal (whether subject to tidal influence or not);
 - > any watercourse, stream or canal in which sewage or stormwater drainage is already being carried off (whether subject to tidal influence or not); or
 - > any stormwater drain, open or underground channel, or open water channel, or water table in any road; or
 - > any sewer, or stormwater drain, or open or underground channel, or open water channel, or water table in any road, or in which sewage or stormwater drainage is already being carried off; or
 - > covered places; or
 - the disposal of sewage or stormwater drainage by works of subsurface irrigation, or any other means specified in the order, or otherwise than by the means specified in the order.

It then becomes the duty of the local government to enforce the order (s.10).

Camping Grounds

The proprietor of a camping ground must ensure that every outlet within a camping ground that receives non-potable water displays a permanent, prominent and legible sign 'UNSUITABLE FOR DRINKING' (Regulation, s.12(d)).

Reporting

- Nil.

Enforcement

Offences & Penalties

Diseases

- It is an offence to fail to comply with section 39 (Notice to cleanse and disinfect) of the Act. Maximum daily penalty — one-half of a penalty unit.
- It is an offence for a person to knowingly cast an agent of a notifiable disease into a receptacle or place without previously disinfecting it (s.43). Maximum penalty — 20 penalty units.

Nuisance

- It is an offence to fail to comply with a nuisance abatement notice issued by a local government. Maximum penalty — 10 penalty units. A range of other orders may also be made (s.79).
- It is an offence to fail to comply with section 85 (Establishing offensive trade etc) of the Act. Maximum penalty — 20 penalty units and 2 penalty units for every day the offence continues after the person has been given a notice to cease by local government.
- It is an offence to fail to comply with section 86 (Causing nuisance or injury to health in the course of carrying on trade, etc) of the Act. Maximum penalty — 20 penalty units for the first offence, with second and subsequent convictions carrying double the previous penalty to a maximum of 80 penalty units. However, a penalty will not be imposed on a person for an accumulation or deposit necessary for the effectual carrying on of any trade, business or manufacture where the accumulation or deposit has not been kept longer than is necessary for the purposes of the trade, business or manufacture, and that the best available means have been taken for preventing injury to public health.
- It is an offence to breach section 87 (Specified nuisances) of the Act. Maximum penalty — 10 penalty units with a maximum daily penalty of 1 penalty unit.

Lead

- It is an offence to breach section 129B (The use of lead in articles used for water carriage or storage) of the Act. Maximum penalty for the owner of the building — 20 penalty units, and a maximum daily penalty of 4 penalty units for each day that the offence is continued after conviction. Where a person is found to have committed an offence wilfully or by culpable negligence, the person may be liable to, in addition to or in lieu of pecuniary penalties, imprisonment for a period not exceeding 12 months (s.143(2)). Water carriage and storage devices that fall within section 129B are deemed to also constitute a nuisance (s.129C), and additional liability for nuisance is imposed.

Mosquito Control

- It is an offence to breach sections 69, 70, 71, 72 or 73 (Mosquito Control) of the Regulation. Maximum penalty — 40 penalty units.
- It is an offence to destroy, damage or obstruct any drain that has been constructed or installed on any premises for the purposes of mosquito control, or to destroy, damage or remove any protective covering affixed to a tank for the purposes of mosquito control (Regulation, s.76). Maximum penalty — 40 penalty units.

Vermin Control

- It is an offence to breach sections 183, 184, 185, 187, 188 or 189 (Vermin Control) of the Regulation. Maximum penalty — 40 penalty units.
- It is an offence to interfere with, damage or destroy any thing which has been constructed or installed or placed on any place for the purposes of vermin control without lawful reason (Regulation, s.196). Maximum penalty — 40 penalty units.

Sewers, Stormwater Drains and Sanitary Conveniences

- It is an offence to fail to comply with a notice issued by a local government to do work to a sewer, stormwater drain or sanitary convenience (s.94). Maximum daily penalty — one half of a penalty unit.

Camping Grounds

- It is an offence to breach section 12(d) of the Regulation (Signage for non-potable water). Maximum penalty — 9 penalty units.

Other

- It is an offence to contravene or fail to comply with any provision of the Act (s.175). Maximum penalty - if no other penalty is imposed, 20 penalty units.

Other Enforcement Mechanisms

- The local government may make local laws with respect to:
 - defining localities in its area within which noxious or offensive trades, businesses, or manufactures may not be established or carried on; and
 - licensing and regulating noxious or offensive trades, businesses or manufactures (s.92).
- The local government may arrange for any of the following in the circumstances specified:
 - removal of offensive or noxious matter where the occupier or owner of the land on which it is found or the owner of the offensive or noxious matter has failed to comply with a notice to remove such matter, and recover expenses incurred in doing so from the person who owned the matter, or the owner or occupier of the land (s.99); and
 - where a local government suspects that any sewer, stormwater drain or sanitary convenience is a nuisance, or injurious or prejudicial to health, it may carry out work on the sewer, stormwater drain or sanitary convenience where the owner or occupier has failed to comply with a notice to do such works within the time specified, and the local government may recover the expenses incurred in doing so from the owner or occupier (s.94); or
 - works to prevent mosquito breeding or harbourage may be carried out where the owner or occupier of premises has failed to comply with a notice to carry out such works within the time specified, and the local government may recover the expenses incurred in doing so from the owner or occupier (Regulation, s.78); and
 - works for the purposes of vermin control may be carried out where the owner or occupier of premises -has failed to comply with a notice to carry out such works within the time specified, and the local government may recover the expenses incurred in doing so from the owner or occupier (Regulation, s.200).
- An inspector may give a notice to comply to a person who they believe on reasonable grounds is committing an offence against a regulation (Regulation, s.209).
- Local governments have power to institute proceedings in respect of any act or omission whereby or in consequence of which a nuisance arises by the pollution of any watercourse, stream or canal within or passing through its area, or passing along the boundaries of its area, against any other local government or person, whether the pollution arises within or outside of the first local government's area. The local government may also take steps deemed necessary to abate the nuisance, and may recover the expenses incurred in doing so from the local government or person by whose act or omission such nuisance has been occasioned (s.21(2)).

Investigation Powers

- The Minister may carry out such inspections, investigations and inquiries as he or she thinks fit in relation to any matters concerning public health or matters with respect to which the chief executive's sanction, approval or consent is required. The chief executive must carry out such inspections, investigations and inquiries as directed by the Governor-in-Council or by the Act (s.15).
- Where the chief executive suspects that a person is suffering from a notifiable disease, any officer may require the person to provide:
 - the person's name and address; and
 - the name and address and whereabouts of any person who may have communicated the disease to the person or to whom the person may have communicated the disease; and
 - information concerning the circumstances in which the person may have been exposed to the disease or may have exposed others to the disease (s.32B).
- The chief executive and the local government and their officers have power to enter any house or premises in order to:
 - ascertain the existence of any nuisance; or
 - ascertain compliance with the Act; or
 - execute any work; or
 - make any authorised inspection or inquiry; or
 - enforce the Act or local laws,between 9.00 am and 5.00 pm or during the business hours of a business (s.160(1)). If admission is refused, a justice may require the occupier to admit the officer (s.160(2)).

Definitions

nuisance includes:

- premises in such a state as to be a nuisance or injurious or prejudicial to health; and
- a swamp, pool, ditch, gutter, watercourse, sanitary convenience, or other accumulation of water on any land or street or a receptacle holding water (other than a reservoir, or a storage of water used in connection with manufacturing purposes), in such a state as to be:
 - a nuisance or injurious or prejudicial to health; or
 - a breeding-ground for mosquitoes; and
 - an accumulation or deposit that is a nuisance or injurious or prejudicial to health.

notifiable disease means a disease stated in part 1, schedule 2 of the Regulation.

stormwater drain means any drain for the carrying off of stormwater, being water other than sewage.

vermin means rats, mice, guineapigs and other rodents capable of carrying or transmitting a notifiable disease, but does not include a protected animal within the meaning of the *Nature Conservation Act 1992*.

vermin-proof material means any material that effectively prevents access by vermin.

water or other liquid for the purposes of mosquito control means water or other liquid in which mosquitoes are likely to breed or that is likely to provide harbourage for mosquitoes.

Checklist

- Does the operation of wastewater treatment facilities constitute a nuisance?
- Are mechanisms in place to ensure that pipes containing lead products are not used in wastewater recycling operations in any building?
- Are mechanisms in place to ensure that local government undertakes its obligation to ensure that sewers, stormwater drains and sanitary conveniences within its area are not causing a nuisance and are not prejudicial to health?
- Are mechanisms in place to ensure that sources of non-potable water in camping grounds are appropriately signed?
- Where wastewater recycling operations will create bodies of water or other liquid which could serve as a breeding place or harbourage for mosquitos, are mechanisms in place to ensure the appropriate mosquito control steps are taken?
- Are mechanisms in place to ensure appropriate vermin control measures are taken at each wastewater recycling facility?

Citation	INTEGRATED PLANNING ACT 1997
Regulations	<i>Integrated Planning Regulation 1998</i>
Reprint Number	2
Administered by	The Minister for Local Government, Planning, Regional and Rural Communities
Relevance to Wastewater recycling	The <i>Integrated Planning Act 1997</i> is the principal legislation in Queensland for regulating development and the effects of development. Of relevance to wastewater recycling, all conditions of an environmental nature for new development are placed on a development approval granted under the <i>Integrated Planning Act 1997</i> rather than attaching to an environmental authority granted under the <i>Environmental Protection Act 1994</i> .
Objects of the Act	<p>The purpose of the Act is to seek to achieve ecological sustainability by:</p> <ul style="list-style-type: none"> • coordinating and integrating planning at the local, regional and State levels; and • managing the process by which development occurs; and • managing the effects of development on the environment (including managing the use of premises) (1.2.1). <p>Ecological sustainability is defined as a balance that integrates:</p> <ul style="list-style-type: none"> • protection of ecological processes and natural systems at local, regional, State and wider levels; and • economic development; and • maintenance of the cultural, economic, physical and social wellbeing of people and communities (1.3.3).

Obligations

Licences/Permits/Approvals

- A development permit is required to carry out assessable development, but is not necessary for self-assessable development or exempt development (s.3.1.4).
- Assessable development will require either code or impact assessment, or both. Whether a particular form of assessable development requires impact or code assessment will be stated in either the *Integrated Planning Regulation 1998*, a planning scheme or a temporary local planning instrument (s.3.1.3).
- Where an application requires code assessment, the application will be assessed only against the common material and applicable codes (s.3.5.4).
- Where the application requires impact assessment and the development is wholly within a planning scheme area, the application will be assessed having regard to:
 - the common material; and
 - the planning scheme and any other relevant local planning instruments; and
 - any relevant State planning policies not referred to in the planning scheme; and
 - any development approval for, and any lawful use of, premises the subject of the application or adjacent premises;
 - if the assessment manager is not a local government, the laws and policies administered by the assessment manager that are relevant to the application; and
 - the matters prescribed under a regulation (s. 3.5.5(z)).
- Where the application requires impact assessment, and the development is outside a planning scheme area, the application will be assessed having regard to:
 - the common material; and

- if the development could materially affect a planning scheme area — the planning scheme and any other relevant local planning instruments; and
 - any relevant State planning policies not referred to in the planning scheme; and
 - any development approval for; and any lawful use of, premises the subject of the application or adjacent premises; and
 - if the assessment manager is not a local government, the laws and policies administered by the assessment manager that are relevant to the application; and
 - the matters prescribed under a regulation (s. 3.5.5(3)).
- Where assessable development is to be assessed under a transitional planning scheme, the assessment manager will have regard to those matters which would have been considered under the *Local Government (Planning and Environment) Act 1990* (s.6.1.29).
 - The assessment manager may approve a development permit application subject to conditions, however the development permit must include any conditions required by a concurrence agency (s. 3.5.11). A condition must:
 - be relevant to, but not an unreasonable imposition on, the development or use of premises as a consequence of the development; or
 - be reasonably required in respect of the development or use of premises as a consequence of the development (s. 3.5.30).
 - A concurrence agency must assess the application against the laws and policies that are administered by the agency (s.3.3.15). For example, the Environmental Protection Agency will assess the application against the requirements of the *Environmental Protection Act 1994*.
 - Where a Minister or a local government has designated land for the provision of community infrastructure by the State, local government or another entity, the development is exempt from any provision of a planning scheme stating that such development is assessable development and therefore requires a development permit (s.2.6.5).

Requirements

- Self-assessable development must comply with the applicable codes (s.3.1.4(3)).
- Where a Minister or a local government has designated land for the provision of community infrastructure by the State, local government or another entity, the development is exempt from any provision of a planning scheme stating that such development is self-assessable development and therefore required to comply with the applicable codes (s.2.6.5).
- A local government may propose a planning scheme (s.2.1.7). A planning scheme must:
 - coordinate and integrate the matters dealt with by the planning scheme, including any State and regional dimensions of the matters; and
 - identify the desired environmental outcomes for the planning scheme area; and
 - include measures that facilitate the desired environmental outcomes to be achieved; and
 - include performance indicators to assess the achievement of the desired environmental outcomes; and
 - if the local government is prescribed under a regulation - include a benchmark development sequence (s.2.1.3).
- A local government may propose a local planning policy to support the local dimensions of a planning scheme (s.2.1.21 & s.2.1.16).
- The Minister may make a State planning policy about matters of State interest (s.2.4.5 & s.2.4.1).

Reporting

- As required by a condition of a development permit.

Enforcement

Offences & Penalties

Development Offences

- It is an offence for a person to start assessable development without a development permit (s.4.3.1). Maximum penalty — 1,665 penalty units.

- It is an offence for a person to fail to comply with the applicable codes when carrying out self-assessable development (s.4.3.2). Maximum penalty — 165 penalty units.
- It is an offence for a person to contravene a development approval, including any condition in the approval (s. 4.3.3). Maximum penalty — 1,665 penalty units.
- It is an offence for a person to contravene a code identified as a code applying to the use of the premises (s. 4.3.4). Maximum penalty — 1,665 penalty units.
- It is an offence for a person to use a premises if the use is not a lawful use (s. 4.3.5). Maximum penalty — 1,665 penalty units.
- It is an offence to fail to comply with codes identified as relevant to a development in the planning scheme where the planning scheme states the development is self-assessable, but schedule 8 states that the development is assessable (s.4.3.2A). Maximum penalty — 165 penalty units.
- It is an offence for a person to give an assessment manager or the chief executive a notice which is false or misleading (s. 4.3.7). Maximum penalty — 1,665 penalty units.

Other General Offences

- It is an offence for a person who is given an enforcement notice to fail to comply with the notice (s. 4.3.15). Maximum penalty — 1,665 penalty units.
- It is an offence for a person to fail to process an application for a development permit where required to do so by an enforcement notice (s. 4.3.16). Maximum penalty — 1,665 penalty units.
- It is an offence for a person to contravene a Magistrates Court order (s. 4.3.20). Maximum penalty — 1,665 penalty units or 12 months imprisonment.

Other Enforcement Mechanisms

- An assessment manager or its agent may enter land at all reasonable times to undertake works if the assessment manager is satisfied that:
 - implementing a development approval would require the undertaking of works on land other than the land the subject of the application; and
 - the applicant has taken reasonable steps to obtain the agreement of the owner of the land to enable the works to proceed, but has not been able to obtain such an agreement; and
 - the action is necessary to implement the development approval (s. 5.5.2).
- If a person is given an enforcement notice and contravenes the notice by not doing something, the assessing authority (if it is not a local government) may do the thing. Any reasonable costs or expenses incurred by an assessing authority in doing so may be recovered by the authority as a debt owing to it by the person to whom the notice was given (s. 4.3.17).

Investigation Powers

- Nil.

Definitions

advice agency for a development application, means an entity prescribed under a regulation as an advice agency for the application, or if the functions of the entity have been devolved or delegated to another entity, the other entity.

applicable code means:

- a code that can reasonably be identified as applying to a development; or
- for self-assessable development under a transitional planning scheme:
 - for development other than building works — the standards or requirements under a transitional planning scheme or interim development control provision applying to self-assessable development; or
 - for building works — the standards and requirements mentioned in paragraph (i) and the Standard Building Regulation.

assessable development means:

- a development specified in schedule 8, part 1 of the Act; or
- development that is not specified in schedule 8, part 1 of the Act, but is declared to be assessable development under the planning scheme for the area; or
- development that before the commencement of the *Integrated Planning Act 1997* would have required an application to be made under the *Local Government (Planning and Environment) Act 1990* for a condition, certificate, permit or approval, or the rezoning of land; or

- because of an amendment of a transitional planning scheme, requires an application for development approval.

assessment manager for an application is:

- (a) if the development is wholly within a local government's area — the local government, unless a different entity is prescribed under a regulation; or
- (b) if paragraph (a) does not apply:
 - (i) the entity prescribed under a regulation; or
 - (ii) if no entity has been prescribed — the entity decided by the Minister.

benchmark development sequence for a planning scheme means a development sequence:

- applying to the areas in the planning scheme where residential development is preferred over a 15 year period (or other period agreed to by the Minister); and
- dividing the areas into 3 successive 5 year stages (or other stages agreed to by the Minister); and
- prepared having regard to any guidelines approved by the chief executive about the method of preparation and the contents of the sequence.

building work means:

- (a) building, repairing, altering, underpinning (whether by vertical or lateral support), moving or demolishing a building or other structure; or
- (b) excavating or filling:
 - (i) for, or incidental to, the activities mentioned in paragraph (a); or
 - (ii) that may adversely affect the stability of a building or other structure, whether on the land on which the building or other structure is situated or on adjoining land; or
- (c) supporting (whether vertically or laterally) land for activities mentioned in paragraph (a).

common material for a development application means:

- all the material about the application the assessment manager has received in the first three stages of IDAS, including any concurrent agency requirements, advice agency recommendations and contents of submissions that have been accepted by the assessment manager; and
- if a development approval for the development has not lapsed — the approval.

community infrastructure includes land and capital works for urban water cycle management infrastructure (including infrastructure for water supply, sewerage, collecting water, treating water, stream management, disposing of waters and flood mitigation).

concurrency agency for a development application means an entity prescribed under a regulation as a concurrent agency for the application, or if the functions of the entity in relation to the application have been devolved or delegated to another entity, the other entity.

development is any of the following:

- carrying out building work;
- carrying out plumbing or drainage work;
- carrying out operational work;
- reconfiguring a lot;
- making a material change of use of a premises.

development approval means a decision notice or a negotiated decision notice that:

- approves, wholly or partially, development applied for in a development application (whether or not the approval has conditions attached to it); and
- is in the form of a preliminary approval, a development permit or an approval combining both a preliminary approval and development permit in the one approval.

development permit authorises assessable development to occur:

- to the extent stated in the permit; and
- subject to:
 - the conditions in the permit; and

- any preliminary approval relating to the development the permit authorises, including any conditions in the preliminary approval.

drainage work means installing, repairing, altering or removing:

- a sanitary drain used, or intended to be used, to carry sewage from sanitary plumbing to a sewer, or on-site sewerage system; or
- a property sewer; or
- an on-site sewerage system, including a common effluent drain, located on a premises; or
- a stormwater installation on premises.

exempt development is development other than assessable or self-assessable development.

IDAS means integrated development assessment system, that is, the system detailed in chapter 3 of the *Integrated Planning Act 1997* for integrating State and local government assessment and approval processes for development.

lawful use of a premise exists if:

- the use is a natural and ordinary consequence of making a material change of use of the premises; and
- the making of the material change of use was in accordance with the *Integrated Planning Act 1997*.

material change of use of a premises means:

- the start of a new use of a premises; or
- the re-establishment on the premises of a use that has been abandoned; or
- a material change in the intensity or scale of the use of the premises.

operational work means:

- extracting gravel, rock, sand or soil from the place where it occurs naturally; or
- planting trees or managing, felling and removing standing timber for an ongoing forestry business (whether in a native forest or a plantation); or
- excavating or filling that materially affects premises or their use; or
- placing an advertising device on premises; or
- undertaking work (other than destroying or removing vegetation) in, on, over or under premises that materially affects premises or their use,

but does not include building, drainage or plumbing work.

plumbing work means installing, repairing, altering or removing any system, or components of a system, for:

- supplying water within premises from the point of connection to a property service; or
- conveying sewage from premises to a sanitary drain; or
- a fire service within premises.

preliminary approval approves assessable development (but does not authorise assessable development to occur):

- to the extent stated in the approval; and
- subject to the conditions in the approval.

reconfiguring a lot means:

- creating lots by subdividing another lot; or
- amalgamating two or more lots; or
- rearranging the boundaries of a lot by registering a plan of subdivision; or
- dividing land into parts by agreement (other than a lease for a term, including renewal options, not exceeding 10 years) rendering different parts of a lot immediately available for separate disposition or separate occupation; or
- creating an easement giving access to a lot from a constructed road.

self-assessable development means:

- development specified in schedule 8, part 2 of the *Integrated Planning Act 1997*; or

- development which is not specified in schedule 8, part 2 but is declared under the planning scheme to be self-assessable development; or
- development that before the commencement of the *Integrated Planning Act 1997* would not have required an application to be made but would have required the development to comply with applicable codes;
- development that because of an amendment of a transitional planning scheme does not require an application for development approval but does require the development to comply with applicable codes.

transitional planning scheme means the provision of a planning scheme under the *Local Government (Planning and Environment) Act 1990* in force immediately before the commencement of the *Integrated Planning Act 1997*.

Checklist

- Is a wastewater treatment facility an assessable development?
- Is recycled wastewater used as part of an assessable development?
- Do the provisions of a planning scheme or a local planning policy affect a wastewater treatment plant or the use of recycled wastewater?
- Should an applicable code be developed for dealing with the use of recycled wastewater?
- Should a State Planning Policy be developed for dealing with the use of recycled wastewater?

Citation	LOCAL GOVERNMENT ACT 1993
Regulations	<i>Local Government Regulation 1994</i>
Reprint Number	4
Administered by	Minister for Local Government, Planning, Regional and Rural Communities
Relevance to Wastewater recycling	The Act enables local governments to prepare local laws which control the public health and environmental risks associated with the use of recycled wastewater. The Act also provides local government with powers of investigation which may be utilised in relation to any Act administered by local government.
Objects of the Act	The objects of the Act include the recognition of the jurisdiction of local government sufficient to allow a local government to take autonomous responsibility for the good rule and government of its area with minimum intervention by the State (s.2).
Obligations	
<p>Licences/Permits/Approvals</p> <ul style="list-style-type: none"> As required by a relevant local law. <p>Requirements</p> <ul style="list-style-type: none"> Each local government has the jurisdiction to make local laws for the good rule and government of its local government area or an area outside its local government area which is put under its control or acquired by it (s.25). However, a local government may exercise the jurisdiction of local government for an area outside its local government area only for the purpose for which the place was put under its control or acquired by it (s.28). A local government may adopt a model local law that has been proposed by the Minister as suitable for adoption by local governments as a local law (s.857). All other requirements contained within relevant local laws. <p>Reporting</p> <ul style="list-style-type: none"> As required by a relevant local law. 	
Enforcement	
<p>Offences & Penalties</p> <ul style="list-style-type: none"> It is an offence to obstruct or hinder a local government or any person in taking any action the local government or person is required or authorised to take under a local government Act (s.1072(1)). Maximum penalty - 50 penalty units. It is an offence for an occupier of land or a structure to fail to disclose the owner's name without reasonable excuse when required to do so by or for a local government or to knowingly state a false name (s.1072(4)). Maximum penalty - 35 penalty units. Any other offence stated in a local law. <p>Other Enforcement Mechanisms</p> <ul style="list-style-type: none"> If an occupier of land or a structure refuses to permit a person who is seeking to exercise the jurisdiction of a local government or a power under a local government Act from entering the land or structure and performing work necessary for the purpose for which entry is sought, the person may make written application to a magistrate for an order directing the occupier to permit the person to enter the land or structure and perform all work necessary for the purpose (s.1063). It is an offence to fail to comply with the order. Maximum penalty — 50 penalty units. If the owner or occupier of land or a structure fails to perform work that is required to be performed under a local government Act, a local government may enter the land or structure and perform the work. The amount properly and reasonably incurred by the local government in performing the work is a debt payable to the local government by the person who failed to perform the work (s.1066). 	

- An employee or agent of a local government may enter land or a structure at all reasonable times if the entry is necessary for the exercise of the local government's jurisdiction (s.1070).

Investigation Powers

- An authorised person may enter a place if its occupier agrees to the entry, the entry is permitted by a warrant, or the place is open to the public (s.1091).
- An authorised person may enter a place at any reasonable time to:
 - inspect the place to process an application made under a local government Act;
 - find out whether the conditions on which an authorisation or notice was issued have been or are being complied with; or
 - inspect work carried out under an authorisation or notice (s.1096).
- A local government may approve a program (an approved inspection program) under which authorised persons may enter a place to monitor compliance with a local government Act or an aspect of a local government Act (s.1098).
- An authorised person who enters a place may:
 - (a) search any part of the place; or
 - (b) inspect, test, photograph or film anything in or on the place; or
 - (c) copy a document in or on the place; or
 - (d) take samples of or from anything in or on the place; or
 - (e) take into or onto the place any persons, equipment and materials the authorised person reasonably requires for exercising a power under this division; or
 - (f) require the occupier of the place, or a person in or on the place, to give the authorised person reasonable help to exercise the authorised person's powers under paragraphs (a) to (e) (s.1102(2)).

Definitions

authorisation means an approval, consent, licence, permission, registration or other authority issued under a local government Act.

local government Act means an Act under which a local government may exercise the jurisdiction of local government, and includes, for example, the *Local Government Act 1990*, the *Integrated Planning Act 1997*, a local law, a planning scheme or interim development control provisions.

Checklist

- Are there any local laws dealing with wastewater recycling which are applicable to a particular area?
- Is it appropriate to develop a model local law dealing with wastewater recycling for adoption by local government?

Citation	MARINE PARKS ACT 1982
Regulations	<i>Marine Parks Regulation 1990</i>
Reprint Number	1
Administered by	Minister for Environment and Heritage
Relevance to Wastewater recycling	The Act deals with activities that may impact upon a marine park, with particular provision being made in relation to the discharge of waste into a marine park. Therefore, should recycled wastewater be used in close proximity to a marine park, the restrictions imposed by the Act must be taken into consideration.
Objects of the Act	Long Title: An Act to provide for the setting apart of tidal lands and tidal waters as marine parks and for related purposes.
Obligations	
<p>Licences/Permits/Approvals</p> <ul style="list-style-type: none"> • Permission is required to do any act which may cause a direct and substantial alteration to the physico-chemical environment in a marine park (Regulation, s.19). • Permission is required to discharge or deposit household, industrial, commercial or any other waste in a marine park (Regulation, s.20). This requirement does not apply to the discharge or depositing of waste in a zone where the relevant zoning plan allows the zone to be used for that purpose. <p>Requirements</p> <ul style="list-style-type: none"> • A zoning plan may be made by the chief executive which prohibits or regulates activities within each zone of the marine park (s.17). • A zoning plan for a marine park may prohibit or regulate an act that may be done by a public authority. In this case, the act must not be done except: <ul style="list-style-type: none"> - in the case of prohibition - with the approval of the Minister, and in accordance with the conditions of the approval; or - in the case of regulation - in accordance with the provisions of the zoning plan (s.20). • A person must not enter or use a zone or designated area other than: <ul style="list-style-type: none"> - under a permission under the Regulation; or - for a purpose for which the person may enter or use the zone or designated area under a zoning plan; or - in an emergency (Regulation, s.8A). <p>Reporting</p> <ul style="list-style-type: none"> • Nil. 	
Enforcement	
<p>Offences & Penalties</p> <ul style="list-style-type: none"> • It is an offence to contravene or fail to comply with a provision of a zoning plan (s.17). Maximum penalty — 100 penalty units in the case of an offence occurring within a marine park or in relation to anything within a marine park, with a daily penalty of 20 penalty units for continuing offences; and a maximum penalty of 50 penalty units in any other case, with a daily penalty of 10 penalty units for continuing offences. • It is an offence to fail to do that which a person is directed to do by a person acting under the authority of the Act (s.26(2)). Maximum penalty — 100 penalty units in the case of an offence occurring within a marine park or in relation to anything within a marine park, with a daily penalty of 20 penalty units for continuing offences; and a maximum penalty of 50 penalty units in any other case, with a daily penalty of 10 penalty units for continuing offences. 	

- It is an offence to contravene or fail to comply with a provision of the Act (s.26). Maximum penalty — 100 penalty units in the case of an offence occurring within a marine park or in relation to anything within a marine park, with a daily penalty of 20 penalty units for continuing offences; and a maximum penalty of 50 penalty units in any other case, with a daily penalty of 10 penalty units for continuing offences.
- It is an offence to enter or use a zone or designated area other than under a permission under the Regulation, for a purpose for which the person may enter or use the zone or designated area under a zoning plan, or in an emergency (Regulation, s.8A). Maximum penalty — 100 penalty units.
- It is an offence to contravene or fail to comply with any provision of the Regulation (Regulation, s.42). Maximum penalty — 100 penalty units.
- It is an offence to fail to do that which a person is directed to do by a person acting under the authority of the Regulation (Regulation s.42(2)). Maximum penalty — 100 penalty units.
- It is an offence to fail to comply with a condition of a permission granted under the Regulation (s.42(3)). Maximum penalty — 100 penalty units.

Other Enforcement Mechanisms

- The chief executive may revoke or suspend a permission where the holder fails to comply with any provision, condition or restriction to which the permission was subject (Regulation, s.11).
- Where it appears to the chief executive that due to circumstances that were not foreseen and were not reasonably foreseeable at the time the permission was granted, damages, degradation or disruption to the physical environment or living resources has occurred, or there is an imminent threat of damage, degradation or disruption, the chief executive may revoke, suspend or vary the conditions of, or impose additional conditions upon, the permission (Regulation s.12).

Investigation Powers

- An inspector has a wide range of investigation powers under the Act including the power to enter any place in a marine park and make such examination, investigation or inquiry as is necessary to ascertain whether the provisions of the Act are being complied with (Regulation s.38).

Definitions

marine park means an area set apart and declared under the Act as a marine park and includes the tidal waters within the area, tidal land within the area, the subsoil beneath such tidal land, the airspace above the area and all marine products within the area.

public authority means any department of the government, any local government and any other person constituted by or under an Act.

tidal land means land that is submerged at any time by tidal waters.

tidal waters means Queensland waters that are subject to tidal influence.

zone means a zone created by a zoning plan.

Checklist

- Where it is proposed to discharge recycled wastewater into a marine park, will the recycled wastewater cause a direct and substantial alteration to the physico-chemical environment in the marine park?
- Where it is proposed to discharge recycled wastewater into a marine park, will the recycled wastewater be considered to constitute a waste for the purposes of the Act?
- Where it is proposed to discharge recycled wastewater into a marine park, will the discharge be permitted under an applicable zoning plan?

Citation	MINERAL RESOURCES ACT 1989
Regulations	<i>Mineral Resources Regulation 1990</i>
Reprint Number	5
Administered by	Minister for Mines and Energy
Relevance to Wastewater recycling	The Act regulates mining activities in Queensland. The mining industry has been particularly noted as one in which wastewater recycling is practised. For example, water obtained from the dewatering of a mine may often be used for dust suppression or mineral processing activities. However, scope exists to ensure that the use of recycled wastewater becomes a condition of a mining lease through the vehicle of the environmental management overview strategy.
Objects of the Act	<p>The principal objectives of the Act are to:</p> <ul style="list-style-type: none"> • encourage and facilitate prospecting and exploring for and mining of minerals; and • enhance knowledge of the mineral resources of the State; and • minimise land use conflict with respect to prospecting, exploring and mining; and • encourage environmental responsibility in prospecting, exploring and mining; and • ensure an appropriate financial return to the State from mining; and • provide an administrative framework to expedite and regulate prospecting and exploring for and mining of minerals; and • encourage responsible land care management in prospecting, exploring and mining (s.2).
Obligations	
<p>Licences/Permits/Approvals</p> <ul style="list-style-type: none"> • A mining lease will be subject to the following conditions: <ul style="list-style-type: none"> - the holder must submit a plan of operations that is consistent with the accepted environmental management overview strategy; and - the holder must conduct mining activities under the mining lease in accordance with the accepted environmental management overview strategy and current plan of operations; and - the holder must conduct an environmental audit for any proposed plan of operations or amendment of a plan of operations and submit an environmental audit report with the plan or amendment; and - the holder must deposit any security required by the Minister from time to time under the Act (s.276(1)). • A condition may be imposed on a mining lease which requires compliance with specified codes of conduct or practice or industry agreements (s.276(4)). <p>Requirements</p> <ul style="list-style-type: none"> • These are specified in the environmental management overview strategy and plan of operations. <p>Reporting</p> <ul style="list-style-type: none"> • These are specified in the environmental management overview strategy and plan of operations. 	

Enforcement

Offences & Penalties

- If the Minister considers that the holder of a mining lease has failed to comply with any condition of the mining lease, the Minister may cancel the mining lease or impose a penalty not exceeding 1,500 penalty units (s.308). The Minister is required to issue a show cause notice before taking such action.

Investigation Powers

- The mining registrar and field officers have wide powers of investigation under section 342 of the Act including the power to enter land and make such investigations and inquiries as are necessary to ascertain whether the provisions of the Act (including the conditions of a mining lease) are being complied with.

Definitions

environment has the meaning given by the *Environmental Protection Act 1994*.

environmental overview strategy states strategies for:

- protecting the environment and managing environmental impacts on, and in the vicinity of, the land to be covered by the lease; and
- progressive and final rehabilitation of the land.

Checklist

- In general, do environmental management overview strategies or plans of operation demand that recycled wastewater be utilised in relation to mining operations?
- Should a code of practice dealing with the use of recycled wastewater in relation to mining activities be developed to be attached as a condition of a mining lease?

Citation	NATURE CONSERVATION ACT 1992
Regulations	<i>Nature Conservation Regulation 1994</i>
Reprint Number	2
Administered by	Minister for Environment and Heritage
Relevance to Wastewater recycling	The Act regulates activities in protected areas. As such, where recycled wastewater is to be released into a protected area, regard must be had to the restrictions imposed by this Act.
Objects of the Act	The conservation of nature (s.4).
Obligations	
<p>Licences/Permits/Approvals</p> <ul style="list-style-type: none"> The approval of the chief executive is required to erect a structure or carry out work in a protected area (Regulation, s.71). <p>Requirements</p> <ul style="list-style-type: none"> A person must not interfere with a natural resource of a protected area, other than under: <ul style="list-style-type: none"> the interim or declared management intent for the area; or any conservation agreement or covenant applicable to the area; or a lease, agreement, licence, permit or other authority granted under the Act, the Regulations or another Act; or if the area is a conservation park, resources reserve, nature refuge, coordinated conservation area, wilderness area, World Heritage management area or international agreement area - an exemption under a regulation (s.62). A person must not pollute a lake or watercourse in a protected area or interfere with a water supply or water storage facility (Regulation, s.80). <p>Reporting</p> <ul style="list-style-type: none"> Nil. 	
Enforcement	
<p>Offences & Penalties</p> <ul style="list-style-type: none"> It is an offence to breach section 62 (Interference with natural resources of a protected area) of the Act. Maximum penalty — 3,000 penalty units or 2 years imprisonment. It is a defence to such a charge that the interference occurred during the course of a lawful activity that was not directed towards the interference, and interference could not have been reasonably avoided. It is an offence to fail to comply with section 80 (Pollution of waterways in protected area) of the Regulation. Maximum Penalty — 50 penalty units. It is an offence to erect a structure or carry out work in a protected area without the chief executive's written approval or in contravention of the terms of the chief executive's approval (Regulation, s.71). Maximum penalty - 165 penalty units. <p>Investigation Powers</p> <ul style="list-style-type: none"> Conservation officers have a range of investigative powers under Part 9 of the Act including the power to enter a place for the purpose of finding out whether the Act is being complied with and the power to seize evidence. 	

Definitions

interfere with in relation to a natural resource, includes destroy or damage, mark, move and dig up.

natural resources in relation to a protected area means the natural and physical features of the area, including wildlife, soil, water, minerals and air.

protected area means:

- national parks (scientific); and
- national parks; and
- national parks (Aboriginal and Torres Strait Islander land); and
- conservation parks; and
- resources reserves; and
- nature refuges; and
- coordinated conservation areas; and
- wilderness areas; and
- World Heritage management areas; and
- international agreement areas.

watercourse means a river, creek or stream in which water flows permanently or intermittently.

Checklist

- Are mechanisms in place to ensure that the use of recycled wastewater does not interfere with the natural resources of a protected area?
- Are mechanisms in place to ensure that the use of recycled wastewater does not interfere with a water supply or water storage facility?
- Are there mechanisms in place to ensure that the use of recycled wastewater does not pollute a lake or watercourse in a protected area?

Citation	SEWERAGE AND WATER SUPPLY ACT 1949
Regulations	<i>Nil</i>
Reprint Number	1
Administered by	Minister for Local Government, Planning, Regional and Rural Communities; Minister for Environment and Heritage
Relevance to Wastewater recycling	The Act prohibits the discharge of a number of substances into sewerage or stormwater drains. The Act is therefore of importance to wastewater recycling as failure to observe the requirements of the Act may affect the potential reuse of stormwater or treated sewerage effluent.
Objects of the Act	An Act to make provision about sewerage, sanitary conveniences, stormwater drainage and water supply (Long Title).
Obligations	
<p>Licences/Permits/Approvals</p> <ul style="list-style-type: none"> A permit or approval issued by a local government under the Standard Sewerage Law is required in order to discharge trade waste into sewerage (s.17A(3)(b)). <p>Requirements</p> <ul style="list-style-type: none"> A prohibited substance must not be discharged into sewerage or stormwater drainage (s.17A(2)). Trade waste must not be discharged into stormwater drainage (s.17A(3)(a)). <p>Reporting</p> <ul style="list-style-type: none"> Nil. 	
Enforcement	
<p>Offences & Penalties</p> <ul style="list-style-type: none"> It is an offence to contravene section 17A (Prohibition on discharge of prohibited substances and trade waste) of the Act. Maximum penalty — 1,000 penalty units. <p>Other Enforcement Mechanisms</p> <ul style="list-style-type: none"> A trade waste approval may be suspended or cancelled if: <ul style="list-style-type: none"> the holder of the approval has contravened a condition of the approval or a provision of the Act; or the terms of the approval are no longer appropriate; or urgent action is necessary in the interests of public health or safety to prevent environmental harm or prevent damage to the local government's sewerage system (Standard Sewerage Law, s.26). <p>Investigation Powers</p> <ul style="list-style-type: none"> Nil. 	
Definitions	
<p>prohibited substances for sewerage means, amongst other substances, a substance that given its quantity is capable alone, or by interaction with another substance discharged into sewerage, of causing a hazard for humans or animals, creating a public nuisance or contaminating the environment in places where effluent or sludge from a sewerage treatment plant is discharged or reused.</p> <p>prohibited substances for stormwater drainage means, amongst other substances, a substance that given its quantity is capable alone, or by interaction with another substance discharged into stormwater drainage, of causing a hazard for humans or animals, creating a public nuisance, creating a hazard in waters in which it is discharged or contaminating the environment in places where stormwater is discharged or reused.</p>	

sewerage means a sewer, access chamber, vent, engine, pump, structure, machinery, outfall or other work used to receive, store, transport or treat sewerage.

stormwater drainage means a drain, channel, pipe, chamber, structure, outfall or other work used to receive, store, transport or treat stormwater.

trade waste means water-borne waste from business, trade or manufacturing premises other than waste that is a prohibited substance, human waste or stormwater.

Checklist

- Are mechanisms in place to ensure that prohibited substances and trade waste are not discharged into sewerage or stormwater drainage systems ?

Citation	STANDARD SEWERAGE LAW
Regulations	<i>Nil</i>
Reprint Number	1
Administered by	Minister for Local Government, Planning, Regional and Rural Communities; Minister for Environment and Heritage
Relevance to Wastewater recycling	The Standard Sewerage Law regulates the operation of sewerage systems and stormwater drainage systems. The requirements imposed by the Act will therefore be of relevance to on-site wastewater recycling facilities, the collection of wastewater for recycling on a regional scale and the construction of sewerage systems.
Objects of the Act	To make provision for sewerage, sanitary conveniences and stormwater drainage (s.3). However, the Law does not regulate sanitary plumbing or sanitary drainage work that is defined by the Law to be unregulated work (s.8).

Obligations

Licences/Permits/Approvals

Sewerage Systems

- Local government approval is required to build a sewerage system (s.28).
- Local government approval is required for a person who builds a sewerage system to be connected to a local government's existing sewerage system (s.34(a)).

On-site Sewerage Facility

- Local government approval is required to install an on-site sewerage facility on a premises or change or take away an on-site sewerage facility from the premises (s.72). An approval may be given with conditions including conditions relating to effluent disposal.

Sanitary Plumbing and Drainage

- Local government approval is required to perform sanitary plumbing, or sanitary drainage work other than minor necessary work (s.45).

Miscellaneous

- A person is not required to obtain an approval or other authority from a local government under the Act if the person has a development permit that either expressly or by necessary implication incorporates the substance of the approval or other authority required under the Act (s.102).

Requirements

Sewerage Systems

- A local government must, to the greatest practicable extent, make sure that all premises in a sewered area are able to be connected directly and separately to the local government's sewerage system (s.14).
- The owner of premises in a local government sewered area must make sure that the soil or waste pipes from all fixtures on the premises, including water closet pans, urinals, sinks, baths, clothes washers and dish washers, discharge into sanitary drainage, and all sanitary drainage on the premises discharges into the local government's sewerage system for the sewered area (s.15).
- The occupier of premises connected to a local government sewerage system must not allow any human or liquid waste from fixtures or appliances, including water closet pans, urinals, sinks, baths, clothes washers and dishwashers, on the premises to be discharged other than into the sewerage system (s.20(1)).
- The occupier of premises connected to a local government sewerage system must not allow anything that is not human or liquid waste from fixtures or appliances, including water closet pans, urinals, sinks, baths, clothes washers and dish washers, on the premises to be discharged into the sewerage system without the local government's approval (s.20(2)).

- A person who builds a sewerage system to be connected with a local government's existing sewerage system must, in building the sewerage system, take all reasonable steps to make sure that the local government's existing sewerage system is always protected from damage (s.34(b)).

Stormwater Drainage

- A local government may, by written notice, require the owner of a premises not more than 100 metres from the local government's stormwater drainage to connect a stormwater installation for the premises to the stormwater drainage in the way, under the conditions and within the time stated (s.39).
- A person must not connect a stormwater installation for a premises to a local government's stormwater drainage if the local government has not given its approval for the connection or the local government has not required the owner of the premises to connect the stormwater installation to the local government's stormwater drainage by written notice (s.40).
- The owner of premises must not allow any part of a stormwater installation for the premises to be connected into an on-site sewerage facility, sanitary drainage or sewerage system (s.41(1)).
- The owner of premises must not allow an on-site sewerage facility, sanitary drainage or property sewer for the premises to be connected into any part of a stormwater installation for the premises or a local government's stormwater drainage (s.41(2)).

On-site Sewerage Facility

- An on-site sewerage facility must not be operated in a way that does not conform with the on-site sewerage code (s.74).
- A person who disposes of effluent from an on-site sewerage facility must dispose of the effluent:
 - in a disposal area on the premises on which the facility is installed conforming with the on-site sewerage code and approved by the local government; or
 - to common effluent drainage; or
 - in another place approved by the local government for the disposal (s.84).
- A person must not install a storage tank for effluent if the tank is not, to the greatest practicable extent, designed, built and tested in the way a septic tank is designed, built and tested under AS/NZS1546 (s.86).
- A person must not discharge waste into an on-site sewerage facility, other than waste that is sewerage for which the facility was installed (s.91).
- A person must not discharge a prohibited substance into an on-site sewerage facility (s.91(2)).

Sanitary Plumbing and Drainage Work

- A person who performs sanitary plumbing or sanitary drainage work must comply with the applied provisions (s.44).
- Where a person performs minor necessary work, the person must give the local government details of the work done and a written notice stating that the work was completed in conformity with this Law within one month after performing the work (s.46).
- Only plumbing or drainage items (apparatus, fitting, fixture, material or pipe) with MAP certification are to be used or installed in sanitary plumbing or drainage or in an on-site sewerage facility (s.47).
- If an inspector is satisfied that a particular plumbing or drainage item is unsuitable for use in particular circumstances, the local government may direct a person not to install or use the item and approve the installation or use of a different item or the original item with a protective coating, lining or wrapping (s.48).

Reporting

- Nil.

Enforcement

Offences & Penalties

- It is an offence for an owner of premises to fail to comply with section 15 (Premises to connect to sewerage system) of the Law. Maximum penalty — 165 penalty units.
- It is an offence for a person to interfere with a local government's sewerage system without the local government's approval (s.17). Maximum penalty — 165 penalty units.
- It is an offence to fail to comply with section 20 (Waste to be discharged to sewerage system) of the Law. Maximum penalty —165 penalty units.

- It is an offence for a person to build a sewerage system without the local government's approval (s.28). Maximum penalty — 165 penalty units.
- It is an offence to fail to comply with section 39 (Local government may require stormwater to discharge into its stormwater drainage) of the Law. Maximum penalty — 165 penalty units.
- It is an offence to fail to comply with section 34 (Protection of local government's sewerage system) of the Law. Maximum penalty — 165 penalty units.
- It is offence for a person to restrict or redirect the flow of stormwater over land in a way that may cause the water to collect and become stagnant or to unreasonably detract from the health, safety, comfort or convenience of the public generally (s.43). Maximum penalty — 165 penalty units.
- It is an offence to fail to comply with section 41 (Stormwater drainage to be separate from sanitary drainage and sewerage system) of the Law. Maximum penalty — 165 penalty units.
- It is an offence to fail to comply with section 45 (Approval needed for sanitary plumbing and sanitary drainage work) of the Law. Maximum penalty — 165 penalty units.
- It is an offence to fail to comply with section 44 (Compliance with applied provisions) of the Law. Maximum penalty - 165 penalty units.
- It is an offence to fail to comply with section 46 (Performing minor necessary work) of the Law. Maximum penalty - 10 penalty units.
- It is an offence to fail to comply with section 47 (Certain items only to be used in sanitary plumbing and drainage works) of the Law. Maximum penalty - 165 penalty units.
- It is an offence to fail to comply with a notice issued under section 48 (Unsuitable apparatus, fittings, fixtures, materials and pipes) of the Law. Maximum penalty - 165 penalty units.
- It is an offence to fail to comply with section 74 (Standard for on-site sewerage facilities) of the Law. Maximum penalty — 40 penalty units.
- It is an offence to fail to comply with section 84 (Disposal of effluent from an on-site sewerage facility) of the Law. Maximum penalty — 40 penalty units.
- It is an offence to fail to comply with section 86 (Sewerage and effluent storage tanks) of the Law. Maximum penalty — 40 penalty units.
- It is an offence to fail to comply with section 91 (Permissible and prohibited discharges) of the Law. Maximum penalty — 40 penalty units.

Other Enforcement Mechanisms

- A local government may, by written notice to the owner of premises, require the owner to connect the premises to a sewerage system or common effluent drainage, or to install an on-site sewerage facility on the premises (s.16). It is an offence to fail to comply with the notice. Maximum penalty — 165 penalty units.
- If a person unlawfully damages a local government's sewerage system or stormwater drainage, the local government may perform work to fix the damage, and may recover the reasonable costs incurred in doing so from the person who caused the damage (s.18, s.17A & s.42).

Investigation Powers

- Nil.

Definitions

applied provisions are the following components of the compilation known generally as the National Plumbing and Drainage Code:

- National Plumbing and Drainage Code - Part 0: Glossary of terms, but only the document published under the designation of AS/NZS 3500.0: 1995;
- National Plumbing and Drainage - Part 2.1: Sanitary plumbing and drainage - Performance requirements, but only the document published under the designation of AS 3500.2.1 - 1996;
- National Plumbing and Drainage - Part 2.2: Sanitary plumbing and drainage - Acceptable solutions, but only the document published under the designation of AS/NZS 3500.2.2: 1996.

AS/NZS 1546 means AS/NZS 1546.1:1998, On-site Domestic Wastewater Treatment Units - Part 1: Septic Tanks, as in force from time to time.

common effluent drainage means a sewerage system for carrying off effluent from premises after treatment in an on-site sewerage facility for the premises that includes a septic tank or another type of on-site sewage treatment plant.

development permit means a development permit issued under the *Integrated Planning Act 1997* for carrying out plumbing or drainage work that is assessable development under schedule 8 of the *Integrated Planning Act 1997*.

environmental plan of a local government means the local government's environmental plan about trade waste management in place under section 41 of the *Environmental Protection (Water) Policy 1997*.

MAP means the manual of authorisation procedures for plumbing and drainage products, designated as SAA MT52.

MAP certification for a component means StandardsMark, WaterMark or TypeTestMark certification of the component under MAP.

minor necessary work means sanitary plumbing or sanitary drainage work that is:

- emergency work; or
- repairing or replacing a sanitary plumbing or sanitary drainage pipe that is broken or damaged, but not if the work involves repairing a sanitary drain at a connection point or replacing more than 3 metres of a sanitary drain; or
- unblocking a sanitary plumbing or sanitary drainage pipe; or
- necessary for performing the maintenance, repair or replacement of a fitting or fixture; or
- other work of a minor nature for repairing sanitary plumbing or drainage.

on-site sewage treatment plant is a sewage treatment plant installed or to be installed on premises as part of an on-site sewerage facility for the premises.

on-site sewerage code is a standard for on-site sewerage facilities published by Standards Australia or jointly by Standards Australia and Standards New Zealand and gazetted by the chief executive as having effect under this Law.

on-site sewerage facility means a facility installed on premises for:

- treating, on the premises, sewage generated on the premises, and disposing of the resulting effluent on the premises or off the premises by common effluent drainage or collection from a tank on the premises; or
- storing on the premises sewage generated on the premises for its subsequent disposal off the premises by collection from the premises.

premises means a lot as defined in section 1.3.5 of the *Integrated Planning Act 1997* and includes a lot that has a building situated on it, or that is wholly or partly contained in, or that wholly or partly contains, a building.

premises group means the land comprised in 2 or more premises all the owners of which have mutual rights and obligations under *Body Corporate and Community (Management Act) 1997* or *Building Units and Group Titles Act 1980* for the purpose of their respective ownerships, and includes the common property.

prohibited substance means prohibited substances for sewerage and prohibited substances for stormwater drainage.

prohibited substances for sewerage is, amongst other substances, a substance that given its quantity is capable alone, or by interaction with another substance discharged into sewerage, of causing a hazard for humans or animals, creating a public nuisance or contaminating the environment in places where effluent or sludge from a sewerage treatment plant is discharged or reused.

prohibited substances for stormwater drainage is, amongst other substances, a substance that given its quantity is capable alone, or by interaction with another substance discharged into stormwater drainage, of causing a hazard for humans or animals, creating a public nuisance, creating a hazard in waters in which it is discharged or contaminating the environment in places where stormwater is discharged or reused.

property connection sewer means a short length of sewer, forming part of a local government's sewerage system, installed for connecting an individual premises to the rest of the sewerage system.

property sewer means a premise's sewer or a premises group's sewer.

sanitary drain means a drain (not including a pipe that is a part of common effluent drainage) that is immediately connected to, and used to carry discharges from, a soil or waste pipe for an individual premises.

sanitary drainage means apparatus, fittings and pipes for collecting and carrying discharges from sanitary plumbing, or from fixtures directly connected to a sanitary drain, to a sewerage system or on-site sewerage facility.

sanitary drainage work includes installing, changing, extending, disconnecting, taking away, repairing and maintaining sanitary drainage.

sanitary plumbing means apparatus, fittings, fixtures and pipes that carry sewage to a sanitary drain.

sanitary plumbing work includes installing, changing, extending, disconnecting, taking away, repairing and maintaining sanitary plumbing.

sewage treatment plant means equipment for one or more of the following - biological treatment of sewage, physical treatment of sewage or chemical treatment of sewage.

sewer means a pipe (other than a sanitary drain or soil pipe or waste pipe) for carrying off sewage from premises.

sewerage system means infrastructure used to receive, transport and treat sewage or effluent.

sewerage system work includes the building, change, extension, repair and maintenance of a sewerage system.

sewered area of a local government, means a part of the local government's area declared by resolution of the local government to be a part of its local government area in which it is prepared to accept sewage and effluent into a sewerage system of the local government.

stormwater drainage means infrastructure used to receive, store, transport or treat stormwater, and consisting of some or all of the following — drains, channels, pipes, chambers, structures, outfalls and other works.

stormwater installation for premises means roof gutters, downpipes, subsoil drains and stormwater drainage for the premises, but does not include any part of a local government's stormwater drainage.

trade waste means water-borne waste for business, trade or manufacturing premises other than waste that is a prohibited substance, human waste or stormwater.

unregulated work means sanitary plumbing or sanitary drainage work that is only:

- cleaning or maintaining ground level grates to traps on sanitary drains; or
- replacing caps to ground level inspection openings on sanitary drains; or
- maintaining an above or below ground irrigation system for the disposal of effluent from an on-site sewerage facility.

Checklist

- Are mechanisms in place to ensure that sewerage systems used to treat sewerage or effluent are constructed and operated in accordance with the provisions of this Law?
- Are mechanisms in place to ensure that stormwater drainage systems are constructed and operated in accordance with the provisions of this Law?
- Are mechanisms in place to ensure that on-site sewerage facilities are constructed and operated in accordance with the provisions of this Law?
- Are mechanisms in place to ensure that sanitary plumbing and drainage work is carried out/ in accordance with the provisions of this Law?

Citation	STANDARD WATER SUPPLY LAW
Regulations	<i>Nil</i>
Reprint Number	1
Administered by	Minister, for Local Government, Planning, Regional and Rural Communities; Minister for Environment and Heritage.
Relevance to Wastewater recycling	The Act regulates the way in which water is supplied by local government. As such, the restrictions imposed by this Act will be relevant when considering the way in which recycled wastewater may be supplied for use. The Act does not apply to water plumbing work that is only installing or maintaining an irrigation or lawn watering system downstream from an isolating valve, tap or backflow prevention device on the supply pipe (s.8).
Objects of the Act	To make provision for water supply (s.3).

Obligations

Licences/Permits/Approvals

Connection to Water Supply System

- Local government approval is required to take water from a property service, standpipe or water main of the local government (s.23(1)). This requirement does not apply to the use of water for fighting a fire or if the local government provides the supply for general public use (s.23(2)).
- Local government approval is required to connect a pipe to a water main or property service of the local government (s.24).
- Local government approval is required to build a property service (s.26).

Design & Installation of Water Supply Systems

- Local government approval is required to a build a water supply system (s.32).
- Local government approval is required for a person who builds a water supply system to be connected to a local government's existing water supply system (s.36(a)).

Installations on Premises

- Local government approval is required to allow a pipe carrying water supplied by the local government to discharge into a water storage tank used to store water obtained from another source (s.54(b)).

Water Plumbing

- Local government approval is required to perform plumbing work which is not minor necessary work (s.39).

Miscellaneous

- A person is not required to obtain an approval or another authority from a local government under the Act if that person has a development permit that either expressly or by necessary implication incorporates the substance of the approval or other authority otherwise required under the Act (s.67).

Requirements

Supply of Water

- Local government may restrict the amount of water supplied, the hours when the water may be used or the way water may be used on a premises if the local government considers it necessary because of climatic conditions, water conservation needs or for public health reasons (s.18(1)). A restriction may be imposed only if:
 - the local government has urgent need for the restriction; or
 - the level of available water supply has fallen to a level at which unrestricted use is not in the interests of the people in the local government area; or
 - the local government has a reasonable and comprehensive demand management strategy and the restriction is essential to make sure that the aims of the strategy are met (s.18(2)).

- Local government may shut off the water supply to a premises for the time reasonably necessary to perform work on the local government's water supply system (s.20).
- Local government may install a water meter on a pipe supplying water to a premises (s.21).

Design & Installation of Water Supply Systems

- Pipes and fittings used to build a water supply system must be approved by local government and installed in compliance with the local government's directions and any specification or standard identified and approved by the local government (s.33).
- In building a water supply system to be connected to an existing local government water supply system, all reasonable steps must be taken to ensure that the local government's water supply system is protected from damage (s.36(b)).

Water Plumbing

- Water plumbing work must comply with the applied provisions (s.38).
- Where a person performs minor necessary works, the person must give the local government details of the work done and a written notice stating that the work was completed in conformity with the Law within one month after completing the works (s.40).

Reporting

- Nil.

Enforcement

Offences & Penalties

- It is an offence to contravene a water restriction imposed by local government (s.18). Maximum penalty — 20 penalty units.
- It is an offence to tamper with a local government water meter (s.22). Maximum penalty — 165 penalty units.
- It is an offence to unlawfully take water (s.23). Maximum penalty — 165 penalty units.
- It is an offence to unlawfully connect to a local government's water main (s.24). Maximum penalty — 165 penalty units.
- It is an offence to do anything likely to pollute water in a local government's water supply system (s.25). Maximum penalty — 165 penalty units.
- It is an offence to build a property service without local government approval (s.26). Maximum penalty — 165 penalty units.
- It is an offence to interfere with a local government's water supply system without the local government's approval (s.29). Maximum penalty — 165 penalty units.
- It is an offence to build a water supply system without local government approval (s.32). Maximum penalty — 165 penalty units.
- It is an offence to use and install pipes and fittings when building a water supply system that are not approved by the local government (s.33). Maximum penalty — 165 penalty units.
- It is an offence to breach section 36 (Protection of local government's water supply system) of the Law. Maximum penalty — 165 penalty units.
- It is an offence to breach section 38 (Water plumbing work to be in compliance with applied provisions) of the Law. Maximum penalty — 165 penalty units.
- It is an offence to breach section 39 (Approval needed for water plumbing works) of the Law. Maximum penalty — 165 penalty units.
- It is an offence to breach section 40 (Performing minor necessary works) of the Law. Maximum penalty — 10 penalty units.
- It is an offence to breach section 41 (Certain items only to be used in water plumbing) of the Law. Maximum penalty — 165 penalty units.
- It is an offence to fail to comply with a notice issued under section 42 (Unsuitable plumbing items) of the Law. Maximum penalty - 165 penalty units.

Other Enforcement Mechanisms

- If a person unlawfully damages a local government's water supply system, the local government may perform work to fix the damage and then recover the reasonable costs incurred in doing so from the person who caused the damage (s.30).

Investigation Powers

- Nil.

Definitions

applied provisions are the following components of the compilation known generally as the National Plumbing and Drainage Code:

- National Plumbing and Drainage Code - Part 0: Glossary of terms, but only the document published under the designation of AS/NZS 3500.0: 1995;
- National plumbing and drainage - Part 1.1: Water supply - Performance requirements, but only the document published under the designation of AS 3500.1.1 - 1998;
- National plumbing and drainage - Part 1.2: Water supply - Acceptable solutions, but only the document published under the designation of AS/NZS 3500.1.2: 1998;
- National Plumbing and Drainage - Part 4.1: Hot water supply systems - Performance requirements, but only the document published under the designation of AS 3500.4.1 - 1997;
- National Plumbing and Drainage - Part 4.2: Hot water supply systems - Acceptable solutions, but only the document published under the designation of AS/NZS 3500.4.2: 1997.

development permit means a development permit issued under the *Integrated Planning Act 1997* for carrying out plumbing or drainage work that is assessable development under schedule 8 of the *Integrated Planning Act 1997*.

interfere with includes dig up, expose and damage.

MAP means the manual of authorisation procedures for plumbing and drainage products designated as SAA MP52.

MAP certification for a component means StandardsMark, WaterMark or TypeTestMark certification of the component under MAP.

minor necessary work means water plumbing work that is:

- emergency work; or
- repairing or replacing a supply pipe that is broken or damaged, but not if the work involves repairing a supply pipe at a connection point or replacing more than 3 metres of a supply pipe; or
- necessary for performing the maintenance, repair or replacement of a fitting; or
- other work of a minor nature for repairing water plumbing.

premises means a lot as defined in section 1.3.5 of the *Integrated Planning Act 1997* and includes a lot that has a building situated on it, or that is wholly or partly contained in, or that wholly or partly contains, a building.

property service means a short length of pipe installed for connecting premises to a water main, whether or not built to the standard of a water main.

water plumbing means apparatus, fittings, and pipes for carrying water within a premises.

water plumbing work includes installing, changing, extending, disconnecting, taking away, repairing and maintaining water plumbing, including hot water plumbing.

water supply system means infrastructure used to reticulate and supply water (whether or not used also to store or treat water) and consisting of water mains, property services and some or all of the following — valves, engines, pumps, structures, machinery and other works.

water supply system work includes the building, change, extension, repair and maintenance of a water supply system.

Checklist

- Are mechanisms in place to ensure that the infrastructure used to provide a supply of recycled wastewater complies with the requirements of the Law ?

Citation	STATE DEVELOPMENT AND PUBLIC WORKS ORGANISATION ACT 1971
Regulations	<i>Nil</i>
Reprint Number	2
Administered by	Minister for State Development
Relevance to Wastewater recycling	The Act essentially allows for the central coordination of development projects of State significance and those requiring infrastructure coordination. Where a wastewater treatment facility is considered to be such a development, or recycled wastewater is used in relation to such a development, the requirements imposed by this Act should be considered.
Objects of the Act	The object of the Act is to provide for State planning and development through a coordinated system of public works organisation, for environmental coordination, and for related purposes (Long Title).
Obligations	
<p>Licences/Permits/Approvals</p> <ul style="list-style-type: none"> • Nil. <p>Requirements</p> <p><i>Program of Works</i></p> <ul style="list-style-type: none"> • The Coordinator-General may plan a program of works for the State or for any part of the State. If the Governor-in-Council then approves the program and authorises it to be implemented, the program of works becomes binding on all persons concerned in the program (Part 3). <p><i>Environmental Coordination</i></p> <ul style="list-style-type: none"> • The Coordinator-General may coordinate departments of the government and local bodies throughout the State in activities to ensure that in any development proper account is taken of the environmental effects (s.29A(1)). • In considering an application made for the granting of approval for a development or in undertaking works, all departments of the government, Crown corporations, local governments and statutory bodies must take account of the environmental effects of the development or work and any administrative arrangements which have been published for this purpose (s.29A(2)). This requirement does not apply to a significant project. • The Coordinator-General may declare a project to be a significant project for which an EIS is required (s.29B). In making this decision, the Coordinator-General must have regard to one or more of the following: <ul style="list-style-type: none"> - detailed information about the project given by the proponent in an initial advice statement; and - relevant planning schemes or policy frameworks, including those of a relevant local government, the State or the Commonwealth; and - the project's potential effect on relevant infrastructure; and - the employment opportunities that will be provided by the project; and - the potential environmental effects of the project; and - the complexity of local, State and Commonwealth requirements for the project; and - the level of investment necessary for the proponent to carry out the project; and - the strategic significance of the project to the locality, region or the State (s.29C). • The Coordinator-General must prepare a report evaluating the EIS (s.29K) and: <ul style="list-style-type: none"> - if the project involves development requiring a development approval under the <i>Integrated Planning Act 1997</i>, the report may state for the assessment manager the conditions that must attach to any development approval, that the approval must be for part only of the development or that the application be refused (s.200); and - if the project is to be regulated under the <i>Mineral Resources Act 1989</i>, the report may recommend to the Minister the conditions that must be attached to a mining lease (s.29T); and 	

- if any other Act requires the preparation of an EIS for the project, the EIS prepared under the Act is taken to satisfy the requirement of the other Act and the report must be taken into consideration by the person required under another Act to approve the project (s.29ZA).

Prescribed Development

- The Governor-in-Council may declare the following to be prescribed development:
 - the development of mineral or energy resources of the State or a proposal for processing or handling of such resources that will be of major economic significance to the State; or
 - the provision of infrastructure in relation to such development, processing or handling which would place an excessive financial burden on the resources of the State or on the residents of the State, or which would significantly affect the priorities or the provision of services and facilities by the Crown or any local body (s.30 & s.32).
- The Coordinator-General is required to prepare an Infrastructure Coordination Plan for each prescribed development (s.34). If the Governor-in-Council approves the plan, every local body and other person specified in the approved plan must comply with the requirements of the plan (s.35).
- Every application relating to a prescribed development that has been made or is made to a local body must be referred by the local body to the Coordinator-General. The local body then has no jurisdiction to deal with the application unless it is remitted to the local body by the Coordinator-General (s.42).
- The Governor-in-Council may refuse the application, or approve the application unconditionally or subject to conditions (s.46). The decision of the Governor-in-Council is final and binding on the applicant, the local body to whom it was made, and all other persons concerned notwithstanding the provisions of any other law applicable to the application (s.47).

Planned Development

- The Governor-in-Council may declare any part of the State to be a State development area if satisfied that the public interest or general welfare of persons resident in any part of the State requires it (s.48). The Coordinator-General must prepare a development scheme for each State development area (s.50), and if the scheme is approved by the Governor-in-Council, take all steps necessary to secure its implementation (s.51).
- The Governor-in-Council may order a local body to undertake works (s.57) or approve the Coordinator-General to undertake works (s.66).
- The Governor-in-Council may establish a project board in order to carry out works (s.70).

Reporting

- Nil.

Enforcement

Offences & Penalties

- It is an offence to fail to comply with a provision of the Act or a requisition made by the Coordinator-General under the Act (s.116). Maximum penalty - \$500 unless a specific penalty is otherwise prescribed.
- It is an offence to wilfully obstruct any person in the exercise of a power conferred upon them for the purpose of carrying out works under the Act (s.88).

Other Enforcement Mechanisms

- Where a local government fails to carry out the works required by an order of the Governor-in-Council in relation to planned development, the Coordinator-General or project board may carry out the works and recover the expenses incurred in doing so from the local government in default (s.63).

Investigation Powers

- The Coordinator-General may require any local government body or other person to give him or her any information the Coordinator-General considers would assist him or her in the discharge of his or her functions under the Act (s.22 & s.47D).
- The Coordinator-General has wide powers to enter land to investigate the land's potential and suitability for the development of an infrastructure facility (s.91E).

Definitions

application means for prescribed development, an application for approval for rezoning of land, for consent to use land, or use or erect any building or other structure for any purpose so as to establish the legal right to use land for a prescribed development.

development means the use of land or water within the State or over which the State claims jurisdiction and includes the construction, undertaking, carrying out, establishment, maintenance, operation, management and control of any works or private works on or in land or water.

environment includes:

- (a) ecosystems and their constituent parts, including people and communities; and
- (b) all natural and physical resources; and
- (c) the qualities and characteristics of locations, places and areas, however large or small, that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community; and
- (d) the social, economic, aesthetic and cultural conditions that affect, or are affected by, things mentioned in paragraphs (a) to (c).

environmental effects means the beneficial as well as the detrimental effects of any development on the physical, biological or social systems within which such development occurs.

infrastructure means those facilities, services and utilities that, in the opinion of the Coordinator-General, are required by or associated with a development or works and includes training schemes relevant to, and accommodation required for a work force related to a development or works and facilities, services and utilities required by or associated with such training schemes or accommodation.

prescribed development means a proposed development, processing or handling of major economic significance to the State declared by the Governor-in-Council to be a prescribed development.

works means the whole and every part of any work, project, service, utility, undertaking or function:

- that the Crown, the Coordinator-General or other person or body who represents the Crown, or any local body is or may be authorised under any Act to undertake; or
- that is or has been undertaken by the Crown, the Coordinator-General or other person or body who represents the Crown, or any local body under any Act; or
- that is included or is proposed to be included by the Coordinator-General as works in a program of works, or that is classified by the holder of the office of Coordinator-General as works.

Checklist

- Is it appropriate for a wastewater recycling system to be the subject of a program of works or to be a significant project?
- Is wastewater recycling ancillary to a prescribed development, and therefore the subject of an accompanying Infrastructure Coordination Plan?
- Is a wastewater recycling scheme to be established in a State development area?

Citation	STOCK ACT 1915
Regulations	<i>Stock (Maximum Chemical Residue Limits) Regulation 1989</i>
Reprint Number	2
Administered by	Minister for Primary Industries
Relevance to Wastewater recycling	The Act regulates the grazing of stock on residue affected land and dealings with residue affected stock. Where it is proposed to use recycled wastewater on land on which Stock graze, or upon which fodder is grown, regard must be had to the restrictions imposed by this Act.
Objects of the Act	The object of the Act is to consolidate and amend the law relating to diseases in stock (Long Title).

Obligations

Licences/Permits/Approvals

- Nil.

Requirements

- An inspector who has reason to suspect or believe that:
 - there has been in a place anything that has been used as fodder and that may have caused residue disease;
 - there is anything being grown or produced in a place that may be used as fodder and that may cause residue disease; or
 - there is any soil or other matter or thing in a place that may have caused or may cause residue disease in stock kept, grazed or put to pasture in that place,
 may give written directions, to the owner which may:
 - > require that any place that the inspector suspects or believes to be the source of residue disease, or may become so, to be isolated or restricted in its use in accordance with the directions unless treatment or work is carried out in accordance with the directions; and
 - > require that any matter or thing that the inspector suspects or believes to be the cause of residue disease, or may become so, to be isolated or held in accordance with the directions unless treated or sold, or otherwise disposed of in accordance with the directions; and
 - > contain other directions as prescribed (s.33(2)).
- The chief inspector, if satisfied that it is necessary to do so in order to prevent, control or eradicate residue disease, may give written directions to the owner of a place, matter or thing, which may:
 - require that a place be isolated or restricted in its use or subjected to treatment or work at the owner's expense, in accordance with the directions; and
 - require that a matter or thing be isolated, held or treated in accordance with the directions, or not be used, sold or otherwise disposed of except in accordance with the directions; and
 - contain other directions as prescribed (s.33(3)).
- The chief executive may order the destruction or disposal of any matter or thing if the chief executive is satisfied that the destruction or disposal is necessary to prevent, control or eradicate residue disease (s.33(5)). This order must be complied with.
- Note that because the definition of **disease** includes **residue disease**, all provisions relating to diseases will apply to residue diseases. The Act regulates diseases in the following sections:
 - quarantine of diseased stocks (s.14); and
 - destruction of stock (s.15); and
 - stock proof fences (s.16); and
 - stray diseased stock (s.19); and

- travelling stock (ss.21-26); and
- notifiable diseases (s.27).
- The Minister may, by notification, declare an area to be an infected area or a declared area in respect of a specified disease (s.13(1)).
- When an area is declared as an infected area or a declared area, the Minister may:
 - require any stock within the infected area to be moved out of that area; or
 - prohibit the introduction into, the movement within or the removal out of an infected or declared area any stock, carcass, fittings, animal products, animal pathogen or biological preparation or any thing likely to spread disease, or permit such introduction, movement or removal subject to conditions; or
 - require any stock, carcass, fodder, fittings, animal product, animal pathogen, biological preparation, soil or anything likely to spread disease that is within the infected or declared area to be subjected to testing or treatment (s.13(2)).

Reporting

- Nil.

Enforcement

Offences & Penalties

- It is an offence to fail to comply with a direction made or a condition imposed by the Minister under section 13(2) (Actions relating to infected and declared areas) of the Act (s.13(4)). Maximum penalty - 40 penalty units or 6 months imprisonment.
- It is an offence to obstruct or prevent testing or treatment required by the Minister under section 13(2) (Actions relating to infected and declared areas) of the Act (s.13(4)). Maximum penalty — 40 penalty units or 6 months imprisonment.
- It is an offence to fail to comply with section 33(2) or section 33(3) (Directions regarding residue diseases) of the Act (s.33(4)). Maximum penalty — 40 penalty units or 6 months imprisonment.
- It is an offence to contravene or fail to comply with a provision of the Act (s.42(1)). Maximum penalty - where no penalty expressly provided, 20 penalty units or imprisonment for 6 months.
- It is an offence to fail to comply with a term, condition or restriction imposed under the Act (s.42(2)). Maximum penalty - where no penalty expressly provided, 20 penalty units or imprisonment for 6 months.
- It is an offence to fail to do that which the person is directed, ordered or required to do by a person acting under the authority of the Act (s.42(3)). Maximum penalty - where no penalty expressly provided, 20 penalty units or imprisonment for 6 months.

Other Enforcement Powers

- If the owner of a place, matter or thing fails to comply with directions or orders requiring the owner to carry out treatment work, an inspector authorised by the chief inspector may carry out the work and for that purpose has all necessary powers of search, entry and seizure. The owner of the place will be liable to pay the costs and expenses reasonably incurred in connection with those steps (s.33(6)).

Investigation Powers

- For the purpose of locating the cause of residue disease, or preventing, controlling or eradicating residue disease, an inspector may:
 - enter, remain in and search any place in order to ascertain whether or not:
 - > there has been in that place anything that has been used as fodder and that may have caused residue disease; and
 - > there is anything being grown or produced in that place or is being held in that place that may be used as fodder and that may cause residue disease; and
 - > there is any soil or other matter or thing in that place that may have caused or may cause residue disease in stock kept, grazed or put to pasture in that place; and
 - make necessary investigations, tests, inspections and inquiries, including breaking into any enclosed place or receptacle or taking any sample of fodder, soil or other matter or thing; and
 - require any person who the inspector suspects or believes on reasonable grounds has information, or has in the person's possession records that contain information, that may assist in the inspector's inquiries, to furnish the information or records for inspection; and

- take notes or copies or extracts from records inspected by the inspector or furnished to the inspector (s.33(1)).
- Inspectors have, in addition to these powers relating specifically to residue diseases, a broad range of general investigative powers (s.29).

Definitions

animal includes a bird or insect of any kind.

animal pathogen means bacteria, virus, protozoa or any other agent or organism capable of causing disease in animals.

animal product includes blood, fat, dairy products, eggs, feathers, animal fibres, semen, ova, faeces, urine or secretion of any stock and any other substance declared by regulation to be an animal product.

disease means a disease prescribed by regulation.

fodder means any hay, straw, grass, green crop, root, vegetable, grain, corn, prepared meals, licks, litter, manure, or any other thing used, or intended for use, as food or litter for stock or found with or about stock.

infected means infected with disease.

notifiable disease means a disease prescribed by regulation as a notifiable disease.

owner means:

- for the purposes of section 33 (Control of Residue Disease), when used in reference to:
 - a place, includes a person with an estate or interest in the place and includes a person who is apparently in charge of the place; or
 - a matter or thing, includes a person who has the matter or thing in the owner's possession; and
- for other purposes, the actual owner, lessee, licensee, or occupier, whether jointly or severally, or the local government or other person apparently having charge or control of any holding or stock, or the authorised agent of or the superintendent or manager for the owner, or the drover of stock and, in the case of stock in any saleyard, includes the authorised agent commissioned to dispose of that stock.

residue disease means a condition consisting of the presence of a chemical or antibiotic residue in the tissues of stock in excess of a particular concentration or level prescribed for the purposes of the definition of "disease", even if the presence of the residue would not be a disease apart from the Act. The *Stock (Maximum Chemical Residue Limits) Regulation 1989* defines maximum residue limits for the purpose of the Act.

stock means buffalo, camels, cattle, deer, goats, horses, llamas, poultry, sheep, swine or other animals prescribed by regulation.

Checklist

- Are mechanisms in place to ensure that the use of recycled wastewater on land will not result in residue disease in stock grazing on that land or consuming fodder grown on that land?
- Are mechanisms in place to ensure that the use of recycled wastewater on land will not result in that land being declared to be an infected area or a declared area?

Citation	WATER RESOURCES ACT 1989
Regulations	<i>Water Resources Regulation 1999</i>
Reprint Number	4
Administered by	Minister for Environment and Heritage; Minister for Natural Resources
Relevance to Wastewater recycling	The Act deals with the construction and use of works for water conservation, water supply, irrigation, drainage and the replenishment of surface and ground waters. The Act also contains a number of provisions dealing with protection of the quality of water resources in Queensland.
Objects of the Act	The object of this Act is to consolidate and amend the law relating to rights in water, the measurement and management of water, the construction, control and management of works with respect to water conservation and protection, irrigation, water supply, drainage, flood control and prevention, improvement of the flow in or changes to the courses of water courses, lakes and springs; protecting and improving the physical integrity of watercourses, lakes and springs; the safety and surveillance of referable dams; and for purposes incidental thereto and consequential thereon (Long Title).

Obligations

Licences/Permits/Approvals

- Except under the authority of the Act, a person does not have the right to:
 - take, use or divert water from, or use works constructed in or on, a watercourse, lake or spring or a weir barrage or dam vested in the Corporation or under the control of the Corporation; or
 - to take, use or divert water from an artesian bore or a sub-artesian bore (s.35).
- A licence is required to:
 - construct works or use works already constructed in or on a watercourse, lake or spring to conserve water, to take water from the watercourse, lake or spring or water contained in or conserved by a weir, barrage or dam; or
 - construct works or use works already constructed in or on a watercourse, lake or spring or on or in connection with land that abuts any of them for the purpose of drainage or for improvement in the flow of water; or
 - take water from a channel constructed by the Corporation outside an irrigation area; or
 - construct, enlarge, deepen or alter an artesian or sub-artesian bore on the person's land (s.38).
- For the purposes of this section "to use works" includes to take and use water contained in works or obtained by means of works.
- The chief executive may grant a department, person or body a permit authorising the taking of water from a watercourse, lake or spring and, in the case of a department, underground water (s.56).
- An owner or occupier of land abutting a watercourse, lake or spring or a weir, barrage or dam vested in or under the control of the Corporation, may use the water for domestic purposes or watering stock without a licence or permit (s.36). However, where the owner or occupier desires to construct or use works to take the water, he or she must obtain a permit (s.57).
- A permit is required to destroy vegetation in a watercourse (s.70). The term "*destroy*" is defined to include the poisoning of vegetation.
- Approval of the Governor-in-Council is required in order to establish an irrigation undertaking (s.110).

Requirements

- The Corporation may construct, maintain, manage, control and operate works for water conservation, water supply, irrigation, drainage, utilisation and distribution, and for the replenishment of the surface and underground waters of Queensland (s.8(1)).
- The Corporation may take all steps and do all acts and things the chief executive thinks fit to protect the water resources of Queensland from anything that results in or is likely to result in a diminution of their quantity, or subject to the *Environmental Protection Act 1994*, from anything detrimental to their quality (s.8(2)).

- The Corporation may:
 - construct works for the supply of water to land or premises; and
 - use water from any watercourse, lake or other source in connection with works or land vested in or under its control; and
 - obtain from a watercourse or lake and its water storages and works an adequate supply of water for the purposes of the Act or any other Act; and
 - divert, intercept and store water coming from any watercourse, lake or other source (s.9).
- The Minister may make a water management plan for parts of Queensland (s.25B). An action taken or a decision made under the Act must not be inconsistent with an applicable water management plan (s.25P).
- For the purpose of preserving water quality, a regulation may declare an area to be a catchment area and authorise the chief executive to control a specified use of the land in a catchment area, including for example, the disposal of effluent (s.27).
- The Corporation may construct all works necessary for the purpose of an irrigation undertaking (s.114).
- The chief executive may grant a nominal allocation of water for land within an irrigation area (s.120).
- For the purpose of works for water conservation, water supply, irrigation, drainage, the prevention of floods and the replenishment or improvement of underground water supplies, the Governor-in-Council may constitute part of Queensland as a water supply area or drainage area and constitute a water supply board or drainage board for that area (s.129). The board may make by-laws for, amongst other things:
 - all matters and things necessary for the proper construction, maintenance, operation, protection and administration of all works under its control and management; and
 - the regulation and control of the taking, supply and use of water from its works; and
 - the use, good management and preservation of land owned by it or under its control; and
 - the preservation of water under its control from pollution in any form (s.156).
- Regulations may be made under the Act in relation to the supply of water, preservation of watercourses against damage, regulation of drainage, protection of water and works, nuisances, use of water for irrigation, domestic purposes, watering stock and other purposes (s.250A).

Reporting

- Nil.

Enforcement

Offences & Penalties

- It is an offence to contravene section 38 (Offences about constructing works and otherwise taking water without the authority of a licence) of the Act. Maximum penalty — 200 penalty units.
- It is an offence to use, divert, appropriate, take, dispose of, waste, pollute, interfere with or obstruct the water, or the flow of water in, a watercourse, lake, spring, channel, underground or other source of supply of water except under the authority of the Act (s.66). Maximum penalty — 200 penalty units.
- It is an offence to destroy vegetation in a watercourse without a permit (s.70). Maximum penalty — 400 penalty units.
- It is an offence to obstruct an officer or another person acting under the authority of the Act in the performance of a function or duty under the Act (s.218). Maximum penalty — 200 penalty units.

Investigation Powers

- Authorised officers have wide powers of investigation under Division 1A, Part 11 of the Act including the power to require the production of documents and the power to require a person to provide information in relation to an offence.

Definitions

artesian bore includes an artesian well and all works constructed in connection with an artesian bore or artesian well from which water flows or has flowed naturally to the surface.

Corporation means the Primary Industries Corporation.

drainage means the removal of water including floodwater from land by means of works or gravitation and includes the removal by those means of water from a lake.

floodwater means water overflowing or erupting or that has overflowed or erupted from a watercourse or lake onto or over riparian land that is not submerged when the watercourse or, as the case may be, lake flows between or is contained within its bed and banks.

irrigation undertaking includes all works and operations necessary for and incidental to carrying into effect the objects and purposes of part 9 of the Act within and in connection with an irrigation area, and also includes so much of the Corporation's business as relates to an irrigation undertaking.

nominal allocation means the quantity of water apportioned under a water allocation at the time that allocation is first granted or apportioned under a subsequent amendment.

sub-artesian bore includes any shaft, well, gallery, spear or excavation and all works constructed in connection with any sub-artesian bore, shaft, well, gallery, spear or excavation which intersects an underground source of water and from which water does not flow naturally to the surface.

watercourse means a river, creek or stream in which water flows permanently or intermittently:

- in a natural channel; or
- in a natural channel artificially improved; or
- in an artificial channel that has changed the course of the watercourse,

but, in any case, only at every place upstream of the point to which the spring tide normally flows and reflows whether due to a natural cause or an artificial barrier or, when the chief executive has declared by notification under the Act a downstream limit then, during the continuance in force of that notification, only at every place upstream of that limit.

works means operations of any kind and all things constructed, erected or installed for or in connection with the purposes of the Act, all sources of water supply and land reserved or set apart, occupied, held or used for or in connection with those operations or those sources.

Checklist

- Are the mechanisms in place to ensure that the appropriate authorities are obtained to construct or use infrastructure to discharge recycled wastewater into a water body?
- Are mechanisms in place to ensure that the appropriate authorities are obtained to discharge recycled wastewater into a water body?
- Are mechanisms in place to ensure that the use of recycled wastewater on land adjacent to a watercourse will not lead to the destruction of vegetation in the watercourse?
- Where recycled wastewater is to be discharged into a water body in an area subject to a water management plan, does the discharge comply with the terms of the plan?
- Where recycled wastewater is to be discharged into an area which has been declared as a catchment area, are mechanisms in place to ensure that the discharge is in compliance with land use controls ordered by the chief executive?
- Where recycled wastewater is to be discharged in a water supply or drainage area, is the discharge in compliance with any by-laws made by the relevant Water Supply Board or Drainage Board?

Citation	WORKPLACE HEALTH & SAFETY ACT 1995
Regulations	<i>Workplace Health and Safety Regulation 1997</i>
Reprint Number	3
Administered by	Minister for Employment, Training and Industrial Relations
Relevance to Wastewater recycling	It will be necessary for wastewater recycling facilities and the users of recycled wastewater to ensure that workplace health and safety requirements imposed by this Act are complied with.
Objects of the Act	The prevention of death, injury or illness caused by a workplace, by workplace activities or by specified high-risk plant (s.7).

Obligations

Licences/Permits/Approvals

- Nil.

Requirements

- An employer has an obligation to ensure the workplace health and safety of each of the employer's workers at work (s.28(1)).
- An employer has an obligation to ensure that his or her own workplace health and safety and the workplace health and safety of others is not affected by the way the employer conducts the employer's undertaking (s.28(2)).
- A self-employed person has an obligation to ensure that his or her own workplace health and safety and the workplace health and safety of others is not affected by the way the person conducts the person's undertaking (s.29).
- A person in control of a workplace has an obligation to ensure the risk of injury or illness from a workplace is minimised for persons coming into the workplace to work and to ensure the risk of injury or illness from any plant or substance provided by the person for the performance of work by someone other than the person's workers is minimised when used properly (s.30).
- Workplace health and safety obligations may be discharged by:
 - if a regulation or ministerial notice prescribes a way of preventing or minimising exposure to risk, by following the prescribed way; or
 - if an advisory standard or industry code of practice states a way of managing exposure to risk, by adopting and following the stated way or another way that gives the same level of protection against risk; or
 - if there is no regulation, ministerial notice, advisory standard or industry code of practice, an appropriate way to discharge the obligation, taking reasonable precautions and exercising proper diligence (s.26 and s.27).
- An employer or self-employed person must not use a registrable workplace, or allow it to be used unless it is registered (Regulation, s.5).

Reporting

- Nil.

Enforcement

Offences & Penalties

- It is an offence to fail to discharge a workplace health and safety obligation (s.24). Maximum penalty:
 - if the breach caused death or grievous bodily harm — 800 penalty units or 2 years imprisonment; or
 - if the breach involved exposure to a substance that is likely to cause death or grievous bodily harm — 500 penalty units or 1 year imprisonment; or
 - if the breach caused bodily harm — 500 penalty units or 1 year imprisonment; or

- otherwise — 400 penalty units or 6 months imprisonment.
- It is a defence to a proceeding against a person for contravention of an obligation for the person to prove:
 - if a regulation or ministerial notice has been made about the way to prevent or minimise exposure to a risk — that the person followed the way prescribed in the regulation or notice to prevent the contravention; or
 - if an advisory standard or industry code of practice has been made stating a way or ways to manage risk — that the person adopted and followed the stated way to prevent the contravention or that the person adopted and followed another way that managed exposure to the risk and took reasonable precautions and exercised proper diligence to prevent the contravention; or
 - if no regulation, ministerial notice, advisory standard or industry code of practice has been made about exposure to a risk — that the person chose any appropriate way and took reasonable precautions and exercised proper diligence to prevent the contravention; or
 - the commission of the offence was due to causes over which the person had no control (s.37).

Other Enforcement Mechanisms

- If an inspector reasonably believes that a person is contravening a provision of the Act or has contravened a provision in circumstances that make it likely that the contravention will continue or be repeated, the inspector may issue an improvement notice to the person, requiring the person to remedy the contravention, likely contravention, or the things or operations causing the contravention or likely contravention (s.117). It is an offence to fail to comply with an improvement notice. Maximum penalty — 40 penalty units.
- If an inspector reasonably believes that circumstances causing, or likely to cause, an immediate risk to workplace health and safety have arisen, or are likely to arise, in relation to a workplace, workplace activity, plant or substance, the inspector may issue a prohibition notice to the person in control of the workplace, workplace activity, plant or substance that caused, or is likely to cause, the circumstances, to stop using, or allowing to be used, the workplace, plant or substance or to stop the activity (s.118). It is an offence to fail to comply with a prohibition notice. Maximum penalty — 40 penalty units or 6 months imprisonment.
- If the chief executive believes that a person to whom an inspector has issued an improvement or prohibition notice has contravened the Act by failing to comply with the notice and because of the failure, there is an imminent risk of serious bodily injury, work caused illness or a dangerous event happening, the chief executive may apply to the Supreme Court for an order that the person comply with the notice (s.119). It is an offence to breach the order under the Act. Maximum penalty — 200 penalty units or 6 months imprisonment
- If an inspector reasonably believes that a workplace or part of a workplace, plant or a substance is so defective or hazardous that it is likely to cause serious bodily injury or work caused illness, the inspector may require the owner to destroy the workplace or part of a workplace, plant or substance or make it harmless (s.123). It is an offence to fail to comply with such a notice. Maximum penalty — 40 penalty units.

Investigation Powers

- Workplace health and safety representatives have a range of powers relating to inspection and information requests (s.81).
- Inspectors have a wide range of investigative powers including right of entry, seizing evidence and dangerous things, and information request (Pt.9).

Definitions

bodily harm has the meaning given in section 1 of the *Criminal Code (Qld)* - any injury which interferes with health or comfort.

dangerous event means an event at a workplace involving imminent risk of explosion, fire or serious bodily harm.

employer means a person who, in the course of the person's business or undertaking, engages someone else to do work, other than under a contract for service, for or at the direction of the person.

grievous bodily harm has the meaning given in section 1 of the *Criminal Code (Qld)* -the loss of a distinct part of an organ of the body, serious disfigurement or any bodily injury of such a nature that, if left untreated, would endanger or be likely to endanger life, or cause or be likely to cause permanent injury to health whether or not treatment is or could have been available.

illness includes a disease.

For the purposes of section 118 (prohibition notices), a person is **in control** of a workplace, workplace activity, plant or substance if the person has, or reasonably appears to have, authority to exercise control over the workplace, activity, plant or substance.

occupier of a place includes a person who reasonably appears to be the occupier or in charge of the place.

owner includes the person from whom a thing was seized unless the chief executive is aware of its actual owner, a mortgagee in possession and a lessee.

registrable workplace includes a workplace where more than two persons are employed and the activities of water supply and sewerage and drainage services are conducted.

self-employed person means a person who performs work for gain or reward and is not an employer or worker.

serious bodily injury means an injury that causes death or impairs a person to such an extent that as a consequence of the injury the person becomes an overnight or longer stay patient in a hospital.

substance means any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour.

undertaking includes business or work activities.

used properly in relation to plant or a substance means used with regard to available appropriate information or advice about its use.

work caused illness means:

- an illness that is contracted by an employer, self-employed person or worker in the course of doing work and to which the work was a contributing factor; or
- the recurrence, aggravation, acceleration, exacerbation or deterioration in a person of an existing illness in the course of doing work to which the work was a contributing factor to the recurrence, aggravation, acceleration, exacerbation or deterioration.

worker means a person who does work, other than under a contract for service, for or at the direction of an employer.

work injury means:

- an injury to an employer, self-employed person or worker in the course of doing work that requires first aid or medical treatment; or
- the recurrence, aggravation, acceleration, exacerbation or deterioration of any existing injury in a person in the course of doing work that requires first aid or medical treatment and to which the work was a contributing factor to the recurrence, aggravation, acceleration, exacerbation or deterioration.

workplace means any place where work is, is to be, or is likely to be, performed by a worker, self-employed person or employer.

workplace activity includes work at a workplace and workplace operations.

workplace health and safety is ensured when persons are free from death, injury or illness caused or created by any workplace or workplace activities.

workplace health and safety officer means a person who holds a current authority for appointment as a workplace health and safety officer and is appointed as a workplace health and safety officer by an employer for the employer's workplace.

Checklist

- Is the way in which wastewater treatment facilities are operated in compliance with the workplace health and safety obligations imposed under the Act?
- Is the use of recycled wastewater in a workplace in compliance with the workplace health and safety obligations imposed under the Act?
- Is it desirable to develop an advisory standard or industry code of practice dealing with ways in which risks associated with wastewater treatment and wastewater reuse may be managed?

This paper was prepared on behalf of the Queensland Environmental Law Association for the Department of Natural Resources, January 2000.

Review of recent developments in planning and environment law in Australia

Ian Wright

This article discusses the recent changes and updates to planning and environment law in Australia

March 2000

Nuclear Activities and Planning Schemes

An interesting problem has recently arisen in Western Australia in respect of planning schemes. Under the *Town Planning and Development Act 1928*, local governments are required to obtain the consent of the Western Australian Planning Commission before advertising planning scheme amendments. Recently, a local government sought approval from the Commission for amendments to its planning scheme prohibiting nuclear activities within its local government area. The Commission refused to grant final approval for the amendments. As a result, the Ministry for Planning is preparing a position paper on the mechanisms currently available to Commonwealth, State and local governments to control nuclear activities. In Queensland, it is clear under the *Integrated Planning Act 1997* that local governments cannot prohibit particular activities. Whilst it is hard to envisage a nuclear activity ever being established in a Queensland local government area, local governments do not have the power to prohibit such activities. This would undoubtedly cause some concern to certain sections of the community.

Conveyancers beware

In the case of *Fraser Parkes Limited v Lang Michener Lawrence and Shaw* (1999) Vancouver C918006, the British Columbia Supreme Court has held a Vancouver solicitor to have breached his duty of care to his clients by failing to alert them to an environmental abatement order applying to property they were purchasing. The plaintiffs retained the defendant's solicitor to act on their behalf in the purchase of unsubdivided land for development as a residential housing complex. At all relevant times there was a dangerous substance located on the property which was resulting in the leaching of contaminants into the soil. All parties were aware of this situation. After the transaction closed but before the subdivision approval was granted the Provincial Ministry of Environment advised the plaintiffs of an outstanding pollution abatement order that had been issued under the British Columbia Waste Management Act dealing with the removal of the contaminant. The plaintiffs sued the defendant's solicitor in negligence. The plaintiff claimed damages in excess of \$2 million for the cost of leachate control and care and charges incurred when the subdivisional approval was delayed.

The court held that the defendant's solicitor had breached the standard of care owed by a reasonable solicitor to its client. Factors that the court considered relevant in finding a breach included:

- The defendant's firm claimed expertise in complex transactions involving commercial real estate purchase and development and should have thus recognised the environmental concerns and sought assistance from a lawyer with environmental expertise.
- The defendant was aware of the applicable environmental legislation and the potential liability of property owners for non-compliance.
- The defendant's firm had in its library a recent manual for avoiding wrongful liability, which highlighted the purchaser's concerns.
- The defendant's firm had issued an alert on wrongful liability to its clients.
- During the course of the transaction in question, the defendant's firm was developing environmental clauses to be added to their standard precedents.
- At the outset of negotiations in this transaction the solicitors had seen a preliminary municipal subdivisional approval that suggested contacting the Provincial Ministry of Environment regarding the leachate problem. The defendant's firm also admitted that the plaintiff was relying on them to conduct due diligence on the plaintiff's behalf.

While the court found that the defendant had breached his duty of care as a solicitor, the plaintiff's case only failed due to a lack of evidence of causation. The court found that there was sufficient evidence that the plaintiff would have proceeded with the transaction regardless of the existence of the pollution.

National Environmental Health Strategy

The National Environmental Health Forum has released its first National Environmental Health Strategy. The strategy is concerned mainly with the management of environmental issues which impact on human health. Central to the strategy is the Australian Charter of Environmental Health which identifies the basic entitlements and responsibilities for individuals and communities, business and industry to live in safe and healthy environments. The strategy outlines processes for improving the assessment, prevention, control and management of environmental health hazards. The implementation stage of the strategy has six priorities including polluted and recreational water, indigenous environmental health, standards and guidelines, health impact assessment, workforce and information.

Emissions

The Australian Greenhouse Office is currently undertaking a feasibility study on the introduction of a national emissions trading system to assist Australia in meeting its commitments under the Kyoto protocol. Four discussion papers on emissions trading have been commissioned to investigate the feasibility of Australia introducing an emissions trading scheme. They include:

- Establishing the Boundaries – a comprehensive review of an emissions trading system.
- Issuing the Permits – a discussion of the allocation of emission permits and the transition towards possible emissions trading within Australia.
- Crediting the Carbon – a discussion about greenhouse gas sequestration and its consequences for land use activities in regional Australia.
- Designing the Market – this discussion paper has yet to be issued.

On a related matter, the NSW government last year passed the world's first carbon rights legislation. The legislation enabled the rights to carbon sequestered in plants and forests to be separated as a legal entity from the land on which the plants and forests grow and the timber rights attached to the plants and trees themselves. Following on from this legislation, the government signed a letter of intent with the Tokyo Electric Power Company in June 1999 to establish a planted forest estimated between 10,000 and 40,000 hectares in as part of that company's portfolio of actions to reduce its greenhouse gas emissions. This investment is potentially in excess of \$100 million dollars.

Professional liability of engineers and planners

A recent attempt was made in the Planning and Environment Court to broaden the liability of consulting engineers. In the case of *Ipswich City Council v Cuthbertson & Ors*, Planning and Environment Application No. 2897 of 1998, the Ipswich City Council sued the developer of a subdivision (Cuthbertson), the firm of engineers retained by the developer, and the employed engineer who had worked on the project.

This case differed from previous attempts to find engineers liable for negligence. Generally councils bring applications under planning legislation such as the *Local Government (Planning and Environment) Act 1990* and the new *Integrated Planning Act 1997* against a developer because of non-compliance with council conditions. If a developer is ordered by the Planning and Environment Court to make the works comply, the developer performs the works and incurs additional costs and then sues the consulting engineer in the District and Supreme Courts alleging the engineer was negligent in failing to ensure that the work complied with the conditions.

In this case however, the Ipswich City Council sought an order from the Planning and Environment Court that the engineer was bound to comply with the council's subdivision conditions, and if the works did not comply, was bound to rectify the works. The condition which was not complied with related to the depth of sub-base in three rural residential roads constructed in a subdivision. The engineer performed inspections and attended at the box and pre-seal inspections with council representatives. The engineer certified the works as complying with council's conditions and it was not until the roads began to fail a short time later that testing revealed that the depth of the base and sub-base layers was less than that required by the council conditions.

The court held that the developer was bound to comply with the council conditions but that the engineer was not. No decision was made regarding the expert evidence and the negligence allegations against the engineer. The Judge said:

"I take it to be the universally accepted proposition that the owner of the land being subdivided is the person primarily struck with the responsibility to carry out the subdivision in accordance with the approval and the conditions which have been applied to it.... I cannot accept that the engineers were bound by condition 3(a) to construct the roads. They merely undertook contractually to assist Cuthbertson to do that. As I have said, the condition actually only binds Cuthbertson."

Vegetation Management Act 1999

The *Vegetation Management Act 1999* was assented to on 21 December 1999 and will commence on a date to be proclaimed. The objectives of the Act are to:

- preserve remnant, endangered and of concern regional ecosystems and areas declared to be of high nature conservation value;
- ensure that clearing does not cause land degradation;
- maintain biodiversity and ecological processes; and
- allow for the sustainable use of land.

The objectives of the Act are intended to be achieved by:

- giving the State the power to regulate the clearing of vegetation on freehold land;
- requiring the development of a State vegetation management policy, approved by the Governor-in-Council, which will include criteria for assessing development applications involving clearing;
- providing for the development of regional vegetation management plans, to be approved by the Minister following public consultation, which will set out detailed assessment criteria for each region;
- establishing penalties for illegal clearing of up to \$126,000 plus the power for Courts to order restoration of damage caused by the illegal clearing; and
- establishing provisions for enforcement and compliance.

The integrated development assessment process established under the *Integrated Planning Act 1997* will be used to assess applications for clearing and development applications which involve clearing. This is intended to ensure that clearing which is the consequence of other forms of development is assessed efficiently.

Amendments to the Integrated Planning Act 1997

The *Local Government and Other Legislation Amendment Act (No. 2) 1999* was assented to on 29 November 1999. This Act amends the *Integrated Planning Act 1997* to better align the Act with corresponding provisions in other legislation. The Act was amended to delay the commencement of certain provisions which provided for the independent review of planning schemes and provisions relating to the development approval arrangements for public housing.

The *Integrated Planning Act 1997* currently contains a number of uncommenced provisions in schedule 8 which indicate the scope of developments proposed to be assessable under the integrated development approval system. Since these provisions tended to cause confusion they have been removed. It is intended they will be progressively replaced with appropriate triggers processed for development as other State Acts are omitted. Amendments have also been made to the community infrastructure designation provisions to take into account recent changes to the *State Development and Public Works Organisation Act 1971*.

Provisions relating to the zoning of closed roads which were previously residing in a transitional regulation as a temporary measure have also been included in the *Integrated Planning Act 1997*.

Amendments to Coastal Protection and Management Act 1995

The *Local Government and Other Legislation Amendment Act (No. 2) 1999* has made amendments to the *Coastal Protection and Management Act 1995* to facilitate the delivery of coastal management plans. A key component of the amendments was to achieve compatibility between the coastal management plans that are required under the *Coastal Protection and Management Act 1995* and planning schemes prepared under the *Integrated Planning Act 1997*. Planning schemes prepared under the *Integrated Planning Act 1997* are statutory instruments but are not subordinate legislation. The *Coastal Protection and Management Act 1995* has been amended to provide that coastal management plans are also statutory instruments but not subordinate legislation. This change is intended to enable coastal management plans to be drafted in a format consistent and compatible with local government planning schemes. It also clarifies the relationship between coastal management plans and the integrated development approval system under the *Integrated Planning Act 1997*. It is intended that relevant parts of the State and regional coastal plans will be deemed to be State planning policies under the *Integrated Planning Act 1997*. As such, they will require local governments and other agencies acting as assessment managers or referral agencies under the integrated development assessment system to have regard to coastal management plans as if they were State planning policies prepared under the *Integrated Planning Act 1997*.

Indigenous cultural heritage

The State government has released a discussion paper in relation to the preparation of draft legislation for the protection of indigenous cultural heritage.

Currently the principal legislation dealing with the protection and conservation of Aboriginal and Torres Strait Islander cultural heritage is the *Cultural Records (Landscapes Queensland and Queensland Estate) Act 1987* (the **Cultural Records Act**). The Cultural Records Act replaced the *Aboriginal Relics Preservation Act 1967* and made some provision for the protection of historic heritage in response to criticism that Queensland had no legislation in place to protect historic heritage places.

The Cultural Records Act followed the introduction of the Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* which enabled the Commonwealth Minister for Aboriginal and Torres Strait Islander Affairs to issue emergency and permanent declarations of protection for Aboriginal and Torres Strait Islander heritage places believed to be under threat. The *Queensland Heritage Act 1992* superseded the provisions of the Cultural Records Act relating to the protection of historic cultural heritage. This means that since 1992 the Cultural Records Act has in the majority of cases only been used in regard to indigenous cultural heritage. The State government has confirmed that the Cultural Records Act will be repealed and replaced with new legislation. The discussion paper provides that cultural heritage will be defined as areas or objects of particular significance to indigenous persons in accordance with indigenous tradition or history.

It is proposed that both cultural heritage areas and objects will be protected in the first instance rather than a system which requires an application to be made to the Minister for protection. This precautionary approach to protection means that it would be an offence to injure or desecrate a significant indigenous area or object. This form of protection will also be linked to a process which may allow the nature of that protection to be more specifically defined, altered or in some cases removed by the State government. It is proposed that the development approval process will be required to take into account the results of a cultural heritage significance assessment for an area. It is intended that any conditions on how an activity must avoid or mitigate impacts to cultural heritage would be attached to a development approval under the *Integrated Planning Act 1997* as concurrence agency requirements.

Code of Practice for onsite sewerage facility

The Department of Natural Resources has released an Interim Code of Practice for Onsite Sewerage Facilities which was gazetted on 2 July 1999. A major aspect of the Interim Code is the requirement for a site and soil evaluation to be undertaken as part of the process of obtaining local government approval for onsite sewerage facilities under the Standard Sewerage Law. The purpose of the site and soil evaluation is to ensure that the most suitable onsite sewerage treatment plant and land application (disposals) facility is selected.

Marine protected area

The Federal government has released a Strategic Plan for Action for the National Representative System of Marine Protected Areas: A Guide for Action by Australian Governments. The plan was jointly developed by State, Territory and Commonwealth agencies and is endorsed by the Australian and New Zealand Conservation Council. The plan is intended to help establish and maintain a comprehensive system of protected areas to protect marine biodiversity and to contribute to the ecological viability of marine ecosystems and environments. It lists 34 actions to be undertaken by the Commonwealth, the States and the Northern Territory to advance marine protected areas in Australia over the next three years. The plan complements the Interim Marine and Coastal Regionalisation for Australia: The Guidelines for Establishing a National Representative System of Marine Protected Areas, published in 1998.

Brothels get the go-ahead

The State government has recognised that street prostitution is associated with organised crime, sexually related health risks and community disharmony. It has also acknowledged that street workers face potential physical danger. In an attempt to minimise the problems associated with such practices, the government will encourage prostitutes to work in brothels rather than soliciting for prostitution on the street or in a public area. This encouragement comes in the form of the *Prostitution Act 1999 (PA)*, which commences operation on 1 July 2000. The PA seeks to:

- ensure the quality of life of local communities;
- safeguard against corruption and organised crime;
- address social factors which contribute to involvement in the sex industry;
- ensure a healthy society; and
- promote safety.

The PA provides for the establishment of a Licensing Authority to implement a licensing and monitoring regime for prostitution in Queensland. The licensing scheme is similar to the scheme that exists for hotels and clubs. To operate a hotel or club in Queensland in addition to development approval under the Integrated Planning Act, an applicant must obtain a liquor licence from the Liquor Licensing Commission.

The Licensing Authority must refuse to grant a licence to an applicant if:

- the applicant is not a suitable person or has been convicted for running a brothel elsewhere;
- the applicant has an interest in another licensed brothel;
- the applicant holds a licence or permit under the *Liquor Act 1992*; or
- the number of brothels within a particular area are such that the area may become a red light district.

To determine whether a person is suitable to be granted a brothel licence, the Licensing Authority will have regard to the applicant's reputation, criminal history and financial resources. The Licensing Authority will also examine the safety arrangements, and whether prostitutes can be readily identified. Licences may be granted with or without conditions for a one year period.

In addition to obtaining a licence under the *Prostitution Act 1999* potential operators of brothels will also have to apply for development approval under IPA. The PA amends IPA to make brothels either code or impact assessable development. An application for a brothel in an industrial area will be code assessable development, whereas an application for a brothel in an area other than an industrial area will be impact assessable and therefore require public notification unless a local planning instrument provides that a brothel is code assessable development.

The PA provides that an assessment manager must refuse an application for a material change of use for a brothel if:

- the land is in a residential area or within 200 metres of a residential area measured according to the shortest route that may reasonably be used in travelling;
- the land is within 200 metres of a community facility such as a school or church;
- the land is in a town with a population of less than 25,000 people and the relevant local government has determined that applications within the area be refused and the Minister has agreed that applications should be refused; or
- there are more than five rooms in the proposed brothel which are to be used for providing prostitution.

As brothels have previously not been lawful it is likely that existing planning schemes will not provide for brothels. Therefore it would be prudent for local governments to review their planning schemes and determine if any amendments are necessary. Amendments might include:

- creating a definition of a brothel;
- inserting the use into the relevant table of development;
- specifying development standards that apply to the use; and
- preparing a planning scheme policy in respect of the use.

In conclusion, brothels are now to be treated like other land uses. They are to be subject to a personal licensing regime and will require development approval. As a result, local governments will have to amend their planning schemes and administrative procedures to take account of these changes.

DMR – rolled Into IDAS

Under section 40 of the *Transport Infrastructure Act 1994 (TIA)*, a local government had to obtain the written approval of the Department of Main Roads (**DMR**) before it approved a development application that would:

- require road works on a State-controlled road;
- have a significant adverse impact on a State-controlled road; or
- have a significant adverse impact on the planning of a State-controlled road or a future State-controlled road.

This situation ceased from 1 December 1999 when the DMR became a referral agency under IPA. Section 40 of the TIA still applies if a local government intends to carry out road works on a local government road or make changes to the management of a local government road.

The IPA now contains six triggers that make the DMR a referral agency for development applications:

- The development has direct access (including via an access easement) to a State-controlled road or future State-controlled road.
- The development has direct access to a local road that intersects with a State-controlled road or future State-controlled road where the access is less than 200 metres of the State-controlled road or future State-controlled road.
- The development is within 100 metres of a State-controlled road or a future State-controlled road (regardless of the access location).
- The development is within the boundaries of a future State-controlled road (defined as a route by the DMR).
- Other developments that are greater than the thresholds in the DMR's referral agency table.
- The development proposal is within a future State-controlled road (not defined as a route by the DMR)

If the DMR is a referral agency under IDAS the applicant will be required to give a copy of the application and the acknowledgment notice to the DMR. As an advice agency the DMR will be able to recommend that conditions be imposed on the approval of a development application or recommend that the application be refused. As a concurrence agency the DMR will be able to require that conditions be imposed on the approval of a development application or require that the application be refused. Alternatively the DMR could require that an approval of an application be for part only, or that the approval be a preliminary approval only.

Gaming machine reform

Last year over 80 percent of Australians gambled losing approximately \$11 billion. By expenditure the use of gaming machines was by far the most popular form of gambling. Australia has about 185,000 gaming machines. This amounts to about 20 percent of the number of broadly comparable machines in the world. Gaming machines were introduced in Queensland in 1992. Since that time their numbers have grown to almost 30,000. In Queensland gaming machines have traditionally been associated with hotels and clubs. This is because in Queensland the *Gaming Machine Act 1991 (GMA)* restricts the operation of gaming machines to premises that have a general, club or prescribed liquor licence.

To operate gaming machines in Queensland an applicant must obtain:

- development approval under the Integrated Planning Act 1997 for a hotel or club;
- a general, club or prescribed liquor licence under the *Liquor Act 1992*; and
- a gaming machine licence under the GMA.

From a planning perspective the use of gaming machines is likely to be ancillary to the operation of a hotel or club. Therefore, unless the use of gaming machines is specifically excluded from the definitions of hotel or club and a specific definition of gaming machines included in a planning scheme, a development approval of a hotel or club will be a development approval for gaming machines. If a separate definition of gaming machines is included in a planning scheme then specific planning approval will be required for their use. Recently hotels with a general licence have begun to appear in shopping centres. Some of these hotels have sought gaming machine licences. The introduction of gaming machines into convenience gambling venues such as shopping centres has caused widespread community concern.

In Queensland the Queensland Gaming Commission is responsible for issuing gaming machine licences. In early 1999 after considering a number of applications for gaming machine licences in or adjacent to shopping centres the Commission issued guidelines to assist applicants by providing information on the issues that the Commission would consider when assessing applications. The Commission identified the following issues as relevant to its consideration of applications for gaming machine licences in shopping centres:

- control of the centre;
- accessibility and social considerations;
- spatial aspects;
- impact on other retailers; and
- potential for expansion of the site.

Having regard to the above issues the guidelines state that the Commission would be unlikely to approve applications for gaming machine licences in the following centres:

- city centres;
- super regional centres;
- major regional centres;
- regional centres;
- showroom-warehouse centres; and
- markets.

The Commission identified the following hierarchy of centres as being the preferred location for gaming machines:

- sub-regional centres;
- neighbourhood centres;
- strip centres; and
- themed centres.

Concerned at the rapid growth of gambling in Australia and its introduction into convenience gambling venues, both the Commonwealth and Queensland Governments have recently prepared reports on its effects. The Commonwealth report found that many Australians have gambling problems. Approximately 130,000 Australians are estimated to have severe problems with their gambling. Another 160,000 Australians are estimated to have moderate gambling problems. The costs of problem gambling include financial and emotional impacts on the gambler and on average at least five other people who the gambler affects (for example the gambler's spouse and children). In recognition of the fact that the impacts of gambling occur at the community level the report recommended that local government be consulted about licence applications.

The Queensland report found that in Queensland gambling has grown at an average compounding rate of 16 percent for the past seven years and that if the current growth were to continue it could become markedly detrimental to Queensland. In order to achieve a more balanced approach to gambling the report made a number of recommendations including:

- restricting gaming machines to traditional hotel and club locations and not permitting them in convenience gambling venues such as shopping centres, bar and grills, ten pin bowling alleys or restaurants with a general licence;
- giving the Queensland Gaming Commission the power to consider public submissions and take into account the wellbeing of the community when determining applications for gaming machines; and
- requiring the Queensland Gaming Commission to consult with local government prior to granting a licence or approving certain increases in gaming machine numbers.

In Queensland some reform has already been implemented. On 10 December 1999, the Queensland Parliament passed amendments to the GMA. The amendments give the Queensland Gaming Commission the power to consider social and community issues when determining applications for gaming machines. Whilst significant change has not yet occurred the release of the two reports indicates that governments recognise that there is a problem and they are prepared to take steps to address it. Local governments may also wish to address this problem through specific amendments to their planning schemes.

This paper was published as a Planning Law Update in the Queensland Planner 40:1, 23-27, March 2000.

LGOLA: The impact on local governments and the professionals who deal with them

Ben Caldwell | Ian Wright

This article discusses the impact of the *Local Government and Other Legislation Amendment Bill 2000* upon local governments along with the people who work alongside local governments

March 2000

Introduction

Background

The *Local Government and Other Legislation Amendment Bill 2000* was introduced into Parliament on 29 February 2000. In this paper we will refer to the *Local Government and Other Legislation Amendment Bill 2000* as **LGOLA**.

LGOLA is expected to be passed by Parliament in mid-March 2000 and will commence operation in late March 2000.

Scope of amendments

LGOLA effects amendments to various pieces of legislation of relevance to local governments and persons who are affected by the actions of local governments.

In particular LGOLA effects three types of amendments:

- Firstly, it amends the *Local Government Act 1993* and the *City of Brisbane Act 1924* to clarify the legal effect of the State government's implementation of the Commonwealth Government's National Competition Policy (**NCP**) and Council of Australian Governments (**COAG**) water reforms.
- Secondly, it makes consequential amendments to the *Integrated Planning Act 1997* to give effect to the review of State government legislation regulating ports, public housing and private certification as well as correcting minor errors in the *Integrated Planning Act 1997*.
- Thirdly, it makes various changes to local government legislation to correct minor errors as well as to clarify the State budgetary reporting of the transfer of assets from the current South East Queensland Water Board to the new South East Queensland Water Corporation Limited.

Clarification of water reform process

Policy background of water reforms

In 1997 the State Parliament introduced Chapter 10 to the *Local Government Act 1993*. The purpose of Chapter 10 was to give effect to the Council of Australian Governments' Water Resource Policy for the urban water services of the 17 largest local governments in Queensland.

The Chapter 10 regime is based on the principles of consumption based pricing, full cost recovery and the removal of cross subsidies where practical. For urban water services two-part tariffs are to be adopted where it is cost effective to do so. Something is cost effective if the benefits gained outweigh the costs introduced.

In broad terms the benefits potentially attributable to introducing a two-part tariff include:

- deferral of water storages, water distribution and water treatment capacity;
- prolonged asset life due to the reduced demand for water;
- savings in operating and treatment costs such as electricity and chemicals;
- enhanced security of supply which for some customers could command a premium; and
- better operational and planning knowledge of systems gained through metering.

The costs of introducing a two-part tariff include:

- installation of meters and their ongoing refurbishment and maintenance;
- reading of meters;
- development of billing systems and upgrading of computer systems;

- ongoing management of the customer billing function;
- strategic responses to any volatility in revenue flow since a greater proportion of the business' revenue is being generated from volumetric sales; and
- customer education and liaison directly relating to the introduction of a two part tariff.

The main benefit driving the introduction of two-part tariffs was an expected reduction in the quantity of water consumed. This reduction would also allow local governments to delay the upgrading of water infrastructure which would result in additional cost savings.

Chapter 10 regime

The regime established by Chapter 10 of the *Local Government Act 1993* requires local governments to do five things:

- first, assess the cost-effectiveness of introducing a two-part tariff for water services;
- second, decide whether a two-part tariff is to be applied for water services;
- third, implement that decision if it is decided to apply a two-part tariff;
- fourth, ensure that charges for water services are based on consumption; and
- fifth, achieve full cost recovery for water services.

A number of local governments purported to follow the Chapter 10 regime. As a consequence, most of the 17 major local governments altered their water charging regimes by introducing two-part tariffs. The two-part tariffs provided for a utility charge consisting of two components:

- firstly, an access component — that is the charge was based on the size of the water connection;
- secondly, a consumption component — that is the charge was based on the quantity of water consumed.

The existing water utility charges were generally not based on consumption. Consumers either paid a fixed charge for an unlimited amount of water or a fixed fee for a specified quantity of water and then a rate per kilolitre for water consumed over that amount.

The existing systems were replaced by two-part tariffs. As a result, the water charges paid by most ratepayers changed. In the case of most ratepayers, the water utility charges dropped as they generally consumed less than the old free allowances. However, in a number of cases, water charges rose substantially. These cases generally fell into two categories:

- firstly, those owners who consumed large volumes of water and therefore had large water connections;
- secondly, those owners who consumed small volumes of water but were required to have large water connections associated with fire safety and other public health and safety legislation.

Those consumers falling into the second category were vocal in their opposition of the new water charging system. They also enlisted the assistance of various industry groups such as various Chambers of Commerce and the Queensland Chamber of Commerce and Industry. As a result, a test case was chosen and funded. This test case involved Hume Doors & Timber (Qld) Pty Ltd (**Hume Doors**) and the Logan City Council. Hume Doors is a manufacturer of timber products located in an industrial area in the northern part of Logan City which is Queensland's third largest local government.

Hume Doors & Timber (Qld) Pty Ltd v Logan City Council [2000] QCA 389

The Logan City Council, like most of the 17 major local governments, had adopted a two-part tariff for water services that consisted of an amount for:

- firstly, an access component — that is the charge was based on the size of the water connection;
- secondly, a consumption component — that is the charge was based on the quantity of water consumed.

The Supreme Court found that the water charges levied by the Logan City Council against Hume Doors in 1998/1999 were invalid.

A primary reason for the result was a finding that the council's water access charges did not answer the statutory description of a two-part tariff in Chapter 10 of the *Local Government Act 1993*.

Section 772 (Definitions for Chapter 10) of the *Local Government Act 1993* defines a two-part tariff as:

"A basis for a utility charge for water services consisting of access and consumption components with the objective of achieving efficiency and sustainability in the use of water".

The *Local Government Finance Standard 1994* in section 103 (Utility charges if two-part tariffs applied) provides:

"If a local government decides under chapter 14 (sic), part 4 of the Act to apply a two-part tariff for a relevant business activity that provides water services, the utility charges for water services must be based on an amount or amounts for units or part of a unit of the quantity of water supplied, but may include an access amount".

This seems to indicate that a two-part tariff can consist of an access component, not linked to consumption and a consumption component, linked to the quantity of water supplied.

However, section 769 (Object of Chapter 10) of the *Local Government Act 1993* requires that a local government must ensure that consumption is the basis for utility charges for water services:

"The object of this chapter is, in relation to relevant business activities that provide water and sewerage services, to achieve efficiency and sustainability in the use of water by:...

(d) requiring charges for water services to be based on consumption..."

Section 783 (Local governments to implement charging and operational arrangements for relevant business activities) of the *Local Government Act 1993* contains a similar requirement:

"783 A local government must ensure that, for a relevant business activity:...

(b) consumption is the basis for utility charges for water services..."

In reconciling these two requirements the Supreme Court in *Hume Doors & Timber (Qld) Pty Ltd v Logan City Council* [2000] QCA 389 found that a two-part tariff must consist of a differential rate for water based on the size of the pipe through which the water is supplied. That is, a two-part tariff requires the water consumed through a larger pipe to be charged at a different, presumably higher, rate than a similar quantity of water supplied through a smaller pipe.

The court also found against the council in *Hume Doors & Timber (Qld) Pty Ltd v Logan City Council* [2000] QCA 389 on three other grounds:

- first, the two-part tariff report did not comply with section 773 (Assessment of cost effectiveness of two-part tariffs to be carried out) of the *Local Government Act 1993* because:
 - it did not comply with the terms of the council's tender for its preparation; and
 - it did not deal with a particular tariff structure or structures;
- second, Chapter 10 of the *Local Government Act 1993* contains a separate power to levy rates for water services in addition to the general power to levy rates for water services under Chapter 14 of the *Local Government Act 1993*; and
- third, Chapter 10 of the *Local Government Act 1993* places restrictions on the general power to levy rates for water services under Chapter 14 of the *Local Government Act 1993*.

Whilst the Supreme Court only declared the water charges levied by Logan City Council on Hume Doors to be invalid, the application of the decision to other local governments sent a shiver through the 17 major local governments. For example, when the Cairns City Council sent out its rates notices in the latter part of 1999, it was inundated with telephone calls from consumers querying the validity of council's charges in the light of the Hume Doors decision.

It is for this reason that the Minister for local government announced to the Parliament on 8 December 1999 that the government would be introducing legislation to address the decision in Hume Doors. LGOLA honours the State government's commitment in this regard.

I will now focus on the amendments that have been proposed by LGOLA to the Local Government Act to ensure the validity of the charges for water services of the 17 major local governments.

Amendments to the Local Government Act 1993

Amendment of s.772 (Definitions for Chapter 10)

It is proposed to insert the following new definitions in section 772 (Definitions for Chapter 10) of the *Local Government Act 1993*:

"access component", of a two-part tariff; means the component fixed for access to water services, independently of the quantity of water supplied.

"consumption component", of a two-part tariff; means the component based on the quantity of water supplied.

"cost effective", for a two-part tariff for a relevant business activity, means application of the tariff is likely to result in savings in costs to the business activity for supplying water, including capital costs."

The definitions of **access component** and **consumption component** are intended to clarify the meaning of a two-part tariff. A two-part tariff will be able to include an access component, not linked to consumption, and a consumption component, linked to the quantity of water consumed. These definitions are intended to clarify that a two-part tariff does not have to be solely linked to consumption as was found in *Hume Doors & Timber (Qld) Pty Ltd v Logan City Council* [2000] QCA 389.

However, a problem with the definition of **access component** is that it does not permit an access component to be based on consumption as suggested by the Supreme Court in *Hume Doors & Timber (Qld) Pty Ltd v Logan City Council* [2000] QCA 389.

The insertion of the definition of **cost-effective** is also intended to clarify that a two-part tariff is cost-effective if the application of the tariff results in savings in costs for supplying water to the water business. The effect of the application of the tariff is not required to be considered in the cost-effectiveness report. In *Hume Doors & Timber (Qld) Pty Ltd v Logan City Council* [2000] QCA 389 the Supreme Court found that a cost-effectiveness report must deal in detail with three matters:

- first, it must include the actual two-part tariff that is proposed to be made by the local government;
- second, the social and financial burden on ratepayers if such a tariff is imposed must be considered; and
- third, the effect of the tariff on consumption and revenue of the local government's water business must be considered.

Pursuant to the new definition it will not be necessary for a local government to consider the effect a two-part tariff will have on ratepayers. It is only required to consider the effect of introducing a two-part tariff on its water business.

Insertion of new s.772A (Consumption as the basis for utility charges for water services)

It is also proposed to insert a new section 772A in the *Local Government Act 1993* which states that a two-part tariff is based on consumption for the purposes of section 783(b) (Local governments to implement charging and operational arrangements for relevant business activities) of the *Local Government Act 1993*. This is intended to overcome the finding in *Hume Doors & Timber (Qld) Pty Ltd v Logan City Council* [2000] QCA 389 that a two-part tariff cannot be based on consumption because the access component is not related to consumption.

Insertion of new s.785A (Two-part tariff to be applied by utility charge)

In *Hume Doors & Timber (Qld) Pty Ltd v Logan City Council* [2000] QCA 389 the Supreme Court found that Chapter 10 of the *Local Government Act 1993* contains a separate power to levy rates for water services in addition to the general power to levy rates for water services under Chapter 14 of the *Local Government Act 1993*.

It is proposed to insert a new section 785A in the *Local Government Act 1993* to clarify that Chapter 10 of the *Local Government Act 1993* only contains preconditions to the implementation of a two-part tariff and the only power to levy rates for water services is found in Chapter 14 of the *Local Government Act 1993*.

Insertion of new s.973A (Validity of particular utility charges)

It is proposed to insert a new section 973A in the *Local Government Act 1993* to clarify that a utility charge for water or sewerage services validly made under Chapter 14 of the *Local Government Act 1993* is not invalid merely because the local government did not comply with the requirements of Chapter 10 of the *Local Government Act 1993*. This is intended to overcome the finding in *Hume Doors & Timber (Qld) Pty Ltd v Logan City Council* [2000] QCA 389 that the provisions of the Chapter 10 regime are mandatory and if not complied with, any utility charge that is introduced is invalid.

Insertion of new s.1244 (Validation for particular utility charges)

It is proposed to insert a new section 1244 in the *Local Government Act 1993* to validate utility charges for water services where a local government had:

- prepared a two-part tariff report; and
- made a resolution under section 780 (Local government to resolve whether to apply a two-part tariff) of the *Local Government Act 1993* to apply the two-part tariff.

It is however not proposed that this section vary the decision of the Supreme Court in *Hume Doors & Timber (Qld) Pty Ltd v Logan City Council* [2000] QCA 389. The purpose of this section is to retrospectively declare that all two-part tariffs are valid regardless of whether a two-part tariff report or the resolution to apply a two-part tariff complied with Chapter 10 of the *Local Government Act 1993*. It is intended to prevent any further Hume Doors type actions without overturning the decision in *Hume Doors & Timber (Qld) Pty Ltd v Logan City Council* [2000] QCA 389.

It should be noted however, that the protection afforded by this section only applies where three criteria are satisfied:

- first, a two-part tariff report must have been prepared and a resolution to apply the tariff made;
- second, all future decisions to apply a two-part tariff must comply with the *Local Government Act 1993* as amended by LGOLA; and
- third, the section does not prevent a utility charge for water services being invalidated on other grounds not covered by the section.

Amendment of the City of Brisbane Act 1924

It is proposed to insert a section in the *City of Brisbane Act 1924* to clarify that a utility charge for water or sewerage services is not invalid merely because the Brisbane City Council did not comply with the requirements of Chapter 10 of the *Local Government Act 1993*.

This amendment is intended to have the same effect as the proposed amendment of the *Local Government Act 1993*.

Fine tuning of private certification

Apart from the amendments to the *Local Government Act 1993* to clarify the implementation of two-part tariffs for water services LGOLA also makes amendments to fine tune the private certification process.

Amendments to the Building Act 1975

Amendment of s.3 (Definitions)

It is proposed to amend the definition of **professional misconduct** in section 3 of the *Building Act 1975*. The definition prescribes certain conduct by a building certifier as professional misconduct. The effect of the amendment will be to:

- extend the definition to Acts other than the BA regulating building certifiers; and
- include as professional misconduct acting outside a building certifier's competence.

If a building certifier is found guilty of professional misconduct, the building certifier's accrediting body must:

- caution or reprimand the building certifier;
- impose conditions on the building certifier's accreditation;
- direct the building certifier to complete educational courses;
- direct the building certifier to report on his or her practice as a building certifier;
- suspend the building certifier's accreditation;
- cancel the building certifier's accreditation; or
- if the accrediting body is satisfied the building certifier is generally competent and diligent and that no other material complaints have been made against the building certifier, take no further action.

Amendment of s.21 (Show cause notices)

The power to issue show cause notices has also been expanded.

The purpose of giving a show cause notice is to:

- let a person know the basis on which it is believed that an enforcement notice should be given; and
- give them an opportunity to make representations in relation to the matter.

Currently only the owner of a building or structure can be given a show cause notice. It is proposed to amend this section to allow a show cause notice to be given to any person who does not comply with the *Building Act 1975*. This will extend the compliance powers of the *Building Act 1975* to those persons who may be directly responsible for a breach of the *Building Act 1975*, but who might not be the owner of the building or structure. For example, show cause notices will be able to be given to tenants, builders and other contractors.

Amendment of s.22 (Enforcement notices)

The power to issue enforcement notices has also been expanded. Currently, section 22 permits enforcement notices to be given for:

- a failure to comply with the *Building Act 1975*; or
- a building or structure that:
 - was built before the commencement of this section without, or not in accordance with, the approval of the local government;
 - is dangerous;
 - is in a dilapidated condition;
 - is unfit for use or occupation; or
 - is filthy, infected with disease or infested with vermin.

It is proposed to amend this section in four respects:

- first, an enforcement notice can be given for building work;

- second, an enforcement notice can be given to any person who does not comply with the *Building Act 1975*;
- third, a show cause notice must first be given to a person who does not comply with the *Building Act 1975* before an enforcement notice is given to them; and
- finally, it is clarified that the requirement to give a show cause notice before giving an enforcement notice applies to both local governments and private certifiers.

Amendment of s.24 (Appeals against enforcement notices)

Section 24 of the *Building Act 1975* allows a person who is given an enforcement notice to appeal to the Building and Development Tribunal about the notice. This section is also proposed to be amended to reflect the amendments in respect of show cause notices and enforcement notices.

Given that it is proposed that an enforcement notice may be given to any person who does not comply with the *Building Act 1975*, it is proposed to amend this section to allow any person who is given an enforcement notice to appeal to the Building and Development Tribunal against the giving of the notice.

Amendment of the Building and Construction Industry (Portable Long Service Leave) Act 1991

Amendment of s.77 (Duty of assessment manager to sight approved form)

LGOLA also amends the *Building and Construction Industry (Portable Long Service Leave) Act 1991*. In particular, section 77 has been amended to require assessment managers to confirm that the long service leave levy required by the *Building and Construction Industry (Portable Long Service Leave) Act 1991* has been paid before accepting development applications under the *Integrated Planning Act 1997*.

It is proposed to amend this section to clarify that it is an offence for a private certifier acting as an assessment manager to accept a development application under section 5.3.5(1) (Private certifier may decide certain development applications and inspect and certify certain works) of the *Integrated Planning Act 1997* unless they have first seen an approved form issued by the Building and Construction Industry (Portable Long Service Leave) Authority signifying that the long service leave levy required by the *Building and Construction Industry (Portable Long Service Leave) Act 1991* has been paid. This section is intended to ensure that the provisions of the *Building and Construction Industry (Portable Long Service Leave) Act 1991* are complied with.

I will now hand over to Ben Caldwell to deal with the amendments proposed to the *Integrated Planning Act 1997* by LGOLA.

Amending the Integrated Planning Act

State involvement in appeals and applications to the Planning and Environment Court

It is proposed to make a number of amendments to the *Integrated Planning Act 1997* relating to the State's ability to become involved in matters before the Planning and Environment Court. Some of the amendments seem to indicate that we might see greater involvement by the State in matters before the court in the future.

Amendment of s.3.6.5 (When development application may be called in)

Section 3.6.5 of the *Integrated Planning Act 1997* specifies when the Minister may call in a development application involving a State interest. A State Interest is defined by the *Integrated Planning Act 1997* as:

- "(a) an interest that, in the Minister's opinion, affects an economic or environmental interest of the State or a region; or
- (b) an interest in ensuring there is an efficient, effective and accountable planning and development assessment system."

This definition is very broad and could mean almost anything. The definition therefore gives the Minister a wide power to call in applications and re-decide them. The only check on the power in the *Integrated Planning Act 1997* is the requirement that the Minister table a report about the Minister's decision in Parliament.

If the Minister calls in an application and re-decides it, there is no right of appeal from the Minister's decision.

If an appeal has been made before an application is called in, pursuant to section 3.6.7(1)(f) (Effect of call in) of the *Integrated Planning Act 1997* the appeal is of no further effect.

It is proposed to amend section 3.6.5 of the *Integrated Planning Act 1997* to vary the circumstances in which an application may be called in by the Minister. It is proposed that from 1 July 2000 an application may only be called in if two preconditions are satisfied:

- first, the development application must involve a State interest; and
- second, the application must be called in within 10 business days after the chief executive receives notice of an appeal against the application.

This amended section is not very different from the existing section. The main purpose behind the amendment is to give the State the right to call in an appeal for 10 business days after they become aware of it. Previously there was no requirement to notify the Minister that an appeal had been filed.

Amendment of s.4.1.21 (Court may make declarations)

Section 4.1.21 of the *Integrated Planning Act 1997* allows any person to bring proceedings in the Planning and Environment Court for a declaration about five matters:

- firstly, a matter done, to be done or that should have been done under the *Integrated Planning Act 1997*;
- secondly, the construction of the *Integrated Planning Act 1997* and planning instruments under the *Integrated Planning Act 1997*;
- thirdly, the lawfulness of a land use or development;
- fourthly, an infrastructure charge; and
- fifthly, a failure by an assessment manager to give an acknowledgment notice.

It is proposed to amend this section to require that from 1 July 2000 any person who applies to the Planning and Environment Court for a declaration must give the chief executive written notice of the application on the day that they file the application. All persons bringing applications for declarations to the Planning and Environment Court should therefore ensure that they comply with this provision from 1 July 2000.

It is also proposed that the Minister may elect to be a party to an application for a declaration by filing a notice of election in the Planning and Environment Court. There is no requirement that the application must involve a State interest for the Minister to join the proceeding. The section also does not specify a time period by which the Minister must elect to join the proceeding. Accordingly, it appears that the Minister may join a proceeding at any time.

This is a significant change to the *Integrated Planning Act 1997*. We will have to wait and see to what extent the Minister becomes involved in applications for declarations before the Planning and Environment Court.

Amendment of s.4.1.41 (Notice of appeal to other parties (div 8))

Section 4.1.41 of the *Integrated Planning Act 1997* requires appellants to give written notice of appeals to the Planning and Environment Court to specified parties within 10 business days. These parties commonly include the applicant, submitters and the assessment manager.

It is proposed to amend this section to require that appellants must also give written notice of appeals to the chief executive from 1 July 2000. The purpose of this amendment is to give the chief executive notice of all appeals so the chief executive can decide whether to:

- call in an application pursuant to section 3.6.5 (When development application may be called in) of the *Integrated Planning Act 1997*; or
- join as a party to an appeal pursuant to section 4.1.46 (Minister entitled to be represented in an appeal involving a State interest) of the *Integrated Planning Act 1997*.

All appellants should ensure that they comply with this provision from 1 July 2000.

It is also proposed to amend this section to require from 1 July 2000 that a notice of appeal given to a person who is not automatically deemed to be a respondent or a co-respondent to the appeal must state what the person must do to become a co-respondent to the appeal. That is, it must advise that they may become a co-respondent by filing a notice of election in the Planning and Environment Court. This amendment is designed to assist people who are not familiar with the Planning and Environment Court's processes. Previously the section merely said that these persons may elect to join the proceedings but did not say what they had to do to join.

Replacement of s.4.1.46 (Minister entitled to be represented in an appeal involving a State interest)

It is proposed to replace section 4.1.46 of the *Integrated Planning Act 1997* to clarify that the Minister may join an appeal involving a State interest by filing a notice of election in the Planning and Environment Court. Previously the section merely said that the Minister was entitled to be represented in an appeal involving a State interest but it did not say how the Minister became involved.

Neither the original section 4.1.46 of the *Integrated Planning Act 1997* or its replacement specifies a time period by which the Minister must elect to join an appeal. Accordingly, it appears that the Minister may join an appeal at any time in the proceedings.

Amendment of s.5.7.6 (Documents the chief executive must keep available for inspection and purchase)

Section 5.7.6 of the *Integrated Planning Act 1997* requires the chief executive to keep certain documents available for inspection and purchase. Now that it is proposed that the Minister be notified about all appeals and applications to the Planning and Environment Court it is proposed to require that from 1 July 2000 the chief executive must keep copies of these notices available for inspection and purchase.

Deeming of applications for aspects of development other than a material change of use of premises

Insertion of new s.6.1.30A (Deeming of certain applications under transitional planning schemes)

It is proposed to insert a new section 6.1.30A in the *Integrated Planning Act 1997* to counter a technical legal argument that has been raised in connection with a number of appeals. The argument is that under a transitional planning scheme made pursuant to the *Local Government (Planning and Environment) Act 1990* development included both the use of land and the erection of a building or structure on the land. Conceptually under the *Integrated Planning Act 1997* this would involve a material change of use for the use of the land, and a preliminary approval for the erection of the building or structure on the land. Therefore an application is required for both of these elements.

On the commencement of the *Integrated Planning Act 1997* some applications involving the erection and use of a building only sought development approval for a material change of use of premises. The intention was that a detailed application for building approval would be made after a development approval was obtained for the use. Submitters however argued that the applications were either invalid or that any subsequent application for building works would require impact assessment for the following two reasons:

- firstly, an application for preliminary approval of building works was not made; and
- secondly, section 3.2.2 (Approved material change of use required for certain developments) of the *Integrated Planning Act 1997* only deems a material change of use application to have been made where such an application was necessary and was not made. There was no section deeming applications to have been made for necessary aspects of development other than a material change of use.

The new section that is proposed to be inserted in the *Integrated Planning Act 1997* operates retrospectively to counter this argument. The section deems that where it is clear from the common material that an application for a material change of use also required preliminary approval for some other aspect of development, it is deemed that the application also sought preliminary approval for that aspect.

Public notification and consequential appeal rights

It is proposed to clarify a number of sections in the *Integrated Planning Act 1997* to make it clear when public notification is required and what parts of an application that was publicly notified confer rights of appeal.

Replacement of s.3.4.2 (When does notification stage apply)

Section 3.4.2 of the *Integrated Planning Act 1997* requires that applications involving impact assessment must be publicly notified.

It is proposed to amend this section to clarify that where any part of an application requires impact assessment the whole of the application must be publicly notified.

The policy reason behind requiring the whole of the application to be publicly notified is to allow the public to consider the application in its entirety rather than just those aspects which require impact assessment. A person who is aware of all aspects of an application might be more inclined to make a submission about the application than if they were only aware of those aspects which required impact assessment.

Amendment of s.4.1.28 (Appeals by submitters)

Whilst a submitter may make a submission about any aspect of an application, section 4.1.28(4) (Appeals by submitters) of the *Integrated Planning Act 1997* provides that appeal rights are only available for those parts of the application which required impact assessment.

Where a local government has a transitional planning scheme some applications may be processed as if they required impact assessment pursuant to section 6.1.28 (IDAS must be used for processing applications) of the *Integrated Planning Act 1997*. This section requires that:

- an application that would have required public notification under the *Local Government (Planning and Environment) Act 1990* must be processed as if the application requires impact assessment under the *Integrated Planning Act 1997*; and
- an application that would not have required public notification under the *Local Government (Planning and Environment) Act 1990* must be processed as if the application requires code assessment under the *Integrated Planning Act 1997*.

It is proposed to amend section 4.1.28(4) of the *Integrated Planning Act 1997* to clarify that where a development application is processed under section 6.1.28(2) (IDAS must be used for processing applications) of the *Integrated Planning Act 1997* as either code or impact assessment appeal rights for submitters are only available for the aspects of the application that would have required public notification under the *Local Government (Planning and Environment) Act 1990*.

It is also proposed to clarify that where an application requires assessment against a concurrence agency code, appeal rights for submitters are not available for the part of the approval that represents the concurrence agency's response for the code. This is consistent with the principle that appeal rights are only available for the parts of an application involving impact assessment.

These amendments seem unnecessary but were probably inserted to put the issue beyond doubt.

Court processes

It is proposed to amend the *Integrated Planning Act 1997* to allow the Planning and Environment Court's Rules to be changed by judges of the District Court and to clarify the circumstances in which costs can be awarded by the Planning and Environment Court.

Amendment of s.4.1.10 (Rules of court)

To change the *Planning and Environment Court Rules 1999* currently the amendment must be approved by two or more Supreme Court judges one of whom must be the Chief Justice.

Given that the judges of the Planning and Environment Court are drawn from the District Court it is proposed to amend section 4.1.10 of the *Integrated Planning Act 1997* so that amendments to the Rules of the Planning and Environment Court can be made by two or more District Court judges one of whom must be the Chief Judge.

Amendment of s.4.1.23 (Costs)

Generally each party to a proceeding in the Planning and Environment Court will bear their own costs for the proceeding. However, the Planning and Environment Court may in limited circumstances award costs for a proceeding. These circumstances include if a party has incurred costs because another party has defaulted in procedural requirements.

It is proposed to amend section 4.1.23 of the *Integrated Planning Act 1997* to clarify that it is a default of the Planning and Environment Court's procedural requirements that triggers the ability to apply for costs, not some other breach of procedural requirements.

It is also proposed to correct an error in subsection (2)(g). This subsection provides that an application may be made for costs if the appellant in responding to an information request did not give all of the information reasonably requested. Given that the appellant is not always the applicant and only applicants are responsible for responding to information requests, it is proposed to amend this section so it refers to an applicant's response to an information request.

Appeal rights

It is proposed to amend the *Integrated Planning Act 1997* to clarify when an appeal may be heard by the Planning and Environment Court.

Replacement of s.4.1.53 (Court must not decide appeal unless notification stage complied with)

Section 4.1.53 of the *Integrated Planning Act 1997* currently says that the Planning and Environment Court cannot decide an appeal unless it is satisfied that the notification stage was complied with. The current drafting of this section has caused some confusion over whether the court can decide an appeal if there has been non-compliance with the Integrated Development Assessment System (IDAS) requirements other than the notification stage.

It is proposed to remove the references in this section to the notification stage to clarify that the court has jurisdiction to decide an appeal if any IDAS requirements have not been complied with, provided the court is satisfied the noncompliance has not:

- adversely affected the awareness of the public of the existence and nature of the application; or
- restricted the opportunity of the public to exercise the rights conferred by the requirements.

Amendment of s.6.1.45A (Development control plans under repealed Act)

Section 6.1.45A was included in the *Integrated Planning Act 1997* to validate development control plans for master planned developments. It is proposed to retrospectively amend this section to:

- firstly, confirm that any appeal rights granted by the development control plans are valid; and
- secondly, preserve rights to claim compensation under the *Local Government (Planning and Environment) Act 1990* for amendments to the development control plans.

Decision notices

It is proposed to make a number of amendments to the *Integrated Planning Act 1997* concerning the jurisdiction of assessment managers and the actions they must take when issuing decision notices.

Amendment of s.3.1.7 (Assessment manager)

Section 3.1.7 of the *Integrated Planning Act 1997* determines the assessment manager for an application. The assessment manager for an application will usually be a local government.

It is proposed to retrospectively amend this section to ensure that when a local government is the assessment manager for a development application on land not wholly within a local government's area, the local government will have jurisdiction to assess and decide the application.

This amendment is necessary as the *Local Government Act 1993* restricts a local government's jurisdiction to its local government area and other areas put under its control for a specific purpose.

Amendment of s.3.5.15 (Decision notice)

Section 3.5.15 of the *Integrated Planning Act 1997* prescribes who the assessment manager must give a copy of a decision notice to and when they must give it to them. It is proposed to amend this section to correct an inconsistency in the time periods prescribed in the *Integrated Planning Act 1997*.

Currently an assessment manager must give a copy of a decision notice to each principal submitter within 5 business days of the commencement of an appeal by an applicant against the approval of their application. However, given that section 4.1.41 (Notice of appeal to other parties (div 8)) of the *Integrated Planning Act 1997* gives an applicant 10 business days in which to notify the assessment manager of their appeal, this time requirement cannot be complied with in all circumstances. Accordingly, it is proposed to amend section 3.5.15 of the *Integrated Planning Act 1997* so that the requirement to give a submitter a copy of the decision notice is only triggered when the applicant gives the assessment manager notice of an appeal.

It is also proposed to amend this section to require that when an assessment manager gives a referral agency a copy of a decision notice they must also give them a copy of any approved plans of development. This part of the amendment will commence on 1 July 2000.

Amendment of s.3.5.17 (Changing conditions and other matters during the applicant's appeal period)

During an applicant's appeal period an applicant may make representations to an assessment manager about a matter in the decision notice. As section 3.5.17 of the *Integrated Planning Act 1997* is currently drafted it could be interpreted that the assessment manager must agree with all of the representations before it must issue a new decision notice. It is proposed to amend this section to make it clear that from 1 July 2000 a new decision notice must be issued if the assessment manager agrees with any of the representations.

In addition the section as currently drafted only requires the assessment manager to notify the applicant if it does not agree with representations about conditions. However, representations can be made about any matter in a decision notice, not only the conditions. It is therefore proposed to amend this section to correct this anomaly.

Amendment of s.3.5.18 (Applicant may suspend applicant's appeal period)

Section 3.5.18 of the *Integrated Planning Act 1997* allows an applicant to suspend their appeal period whilst they make representations to the assessment manager about a matter in a decision notice.

It is proposed to amend this section to make it consistent with sections 4.1.27 (Appeals by applicants) and 4.2.9 (Appeals by applicants) of the *Integrated Planning Act 1997*. Currently if an applicant receives a negotiated decision notice, the balance of the appeal period restarts. Therefore, if the appeal period was suspended after 19 business days, upon receiving a negotiated decision notice, which could make a number of changes to the approval, the applicant would have one business day in which to consider the changes and decide whether to appeal.

The amendments to this section result in having the full appeal period restart the day after the negotiated decision notice is given. Therefore, if a negotiated decision notice is given an applicant will have another 20 business days in which to consider their position. If a negotiated decision notice is not given, the balance of the appeal period will restart.

It is also proposed to amend this section to make it consistent with section 3.5.17 (Changing conditions and other matters during the applicant's appeal period) of the *Integrated Planning Act 1997*. The amendment is intended to allow an assessment manager to notify an applicant that matters other than conditions have not been changed.

Protection of uses of premises

It is proposed to amend the sections of the *Integrated Planning Act 1997* that protect existing lawful uses of premises and lawfully constructed buildings and works.

Replacement of s.1.4.3 (Implied and uncommenced right to use premises protected)

Section 1.4.3 of the *Integrated Planning Act 1997* applies where:

- a material change of use application is not required to conduct a use (that is the development is exempt or self-assessable development); and
- a development permit is required for another aspect of the use (for example building works).

The section protects an implied right to use premises for a purpose that did not require a material change of use application from changes to planning instruments or the introduction of new planning instruments. Provided the part of the development that required a development permit is completed within the required time, the implied right to use the premises is protected for 5 years.

It is proposed to amend this section to clarify that the section only applies if the development permit actually takes effect. A development permit takes effect:

- if there are no submitters and the applicant does not appeal, when the decision notice is given;
- if there are submitters, and the applicant does not appeal, when the submitters' appeal period ends; or
- if an appeal is made, subject to the decision of the court, when the appeal is finally decided.

For example, an application is made for building works for a warehouse in an industrial area. The use of a warehouse on the land is self-assessable development. After the application is made the planning scheme is changed to make the use of a warehouse assessable development requiring impact assessment. Provided a development permit is granted for the building works and the warehouse is built within the required time, there will be an implied right that a warehouse will be self-assessable development for 5 years. If the use does not commence within 5 years a material change of use application will be required.

Amendment of s.1.4.6 (Lawful uses of premises protected)

Section 1.4.6 of the *Integrated Planning Act 1997* protects uses of premises that were lawful before the commencement of the *Integrated Planning Act 1997* provided there has not been a material change of use since the commencement.

It is proposed to amend this section to clarify that the section does not prevent development in relation to a use being assessable or self-assessable development under schedule 8 of the *Integrated Planning Act 1997* if the development starts after schedule 8 commences to apply to it.

For example, building works necessarily associated by an existing use that are made assessable by part 1 of schedule 8 will require development approval.

Insertion of new s.6.1.51A (Certain lawful uses, buildings and works validated)

Section 6.1.51 of the *Integrated Planning Act 1997* provides that all development on State land that is the subject of an Order in Council is lawful.

It is proposed to insert a new section 6.1.51A in the *Integrated Planning Act 1997* to retrospectively protect all continuing uses and buildings or works on State land that were lawful before the commencement of the *Integrated Planning Act 1997* even though the land may have ceased to be State land.

The section seems to be unnecessary given the operation of sections 1.4.6 (Lawful uses of premises protected) and 1.4.7 (Lawfully constructed buildings and works protected) of the *Integrated Planning Act 1997* however the new section should put the issue beyond doubt.

Amendment of sch 8 (Assessable, self-assessable and exempt development)

Before the commencement of the *Integrated Planning Act 1997* on 30 March 1998 the State did not have to comply with planning schemes. Section 6.1.40 (Application of chapter 1, part 5) of the *Integrated Planning Act 1997* continues this exemption until 30 March 2000.

It is proposed to amend schedule 8 of the *Integrated Planning Act 1997* to make a material change of use of premises implied by building work, plumbing work, drainage work or operational work exempt development provided the work was substantially commenced by the State or an entity acting for the State before 31 March 2000. The purpose of the amendment is to ensure that when the works are completed the use of the premises will be a lawful use.

Release of subdivided land from an infrastructure agreement

It is proposed to amend the *Integrated Planning Act 1997* to allow parcels of subdivided land to be released from the obligations of an infrastructure agreement in certain circumstances.

Amendment of s.5.2.5 (When infrastructure agreements bind successors in title)

Section 5.2.5 of the *Integrated Planning Act 1997* allows owners and successors in title to be bound by infrastructure agreements if the owner of the land consents.

It is proposed to amend this section to allow infrastructure agreements to release subdivided parcels of land from the development obligations in the agreement.

Resumption of land for planning scheme purposes

Insertion of new s.6.1.10B (Power to purchase or take land to achieve strategic intent of transitional planning scheme)

Section 8.1 (Power to purchase or take land for planning purposes) of the *Local Government (Planning and Environment) Act 1990* gave local governments the power to resume land for planning scheme purposes. Section 5.5.1 (Local government may take or purchase land) of the *Integrated Planning Act 1997* gives local governments a similar power but this power may only be exercised where it helps to achieve the desired environmental outcomes of a local government's planning scheme.

Given that most local governments have transitional planning schemes that do not list desired environmental outcomes it is proposed to insert a new section 6.1.10B in the *Integrated Planning Act 1997* to give local governments the power to resume land whilst their Integrated Planning Act planning schemes are being prepared.

The power to resume land conferred by this section can only be exercised where it achieves the strategic intent of a transitional planning scheme. This would appear to be a more limited power than that which existed under the *Local Government (Planning and Environment) Act 1990*.

Discretion to amend planning schemes to reflect consequential amendments

Amendment of s.6.1.34 (Consequential amendment of transitional planning schemes)

Section 6.1.34 of the *Integrated Planning Act 1997* requires that if a development application is approved that is inconsistent with a transitional planning scheme the local government must amend its transitional planning scheme to reflect the approval.

It is proposed to amend this section to give local governments the discretion whether to amend their planning schemes to reflect the approval of inconsistent applications.

Miscellaneous corrections and clarifications

Insertion of new s.1.4.8 (Application of div 2 to strategic port land)

LGOLA will make certain development on strategic port land assessable under IDAS.

It is therefore proposed to insert a new section 1.4.8 in the *Integrated Planning Act 1997* to protect existing use rights of strategic port land and buildings and works lawfully constructed on the land.

Insertion of new s.2.1.17A (Inconsistency between planning instruments)

It is proposed to include a new section 2.1.17A in the *Integrated Planning Act 1997* to clarify that where a planning scheme policy is inconsistent with another planning instrument (ie planning scheme, temporary local planning instrument or State planning policy) the other planning instrument prevails.

Section 2.1.16(2) (Meaning of **planning scheme policy**) of the *Integrated Planning Act 1997* deals with similar subject matter to this section but only relates to inconsistencies between planning scheme policies and planning schemes.

Amendment of s.3.1.6 (Preliminary approval may override local planning instrument)

Preliminary approvals give the planning process flexibility in that a conceptual planning approval can be obtained without having to provide a detailed design of the final development.

As section 3.1.6 of the *Integrated Planning Act 1997* is currently drafted it only applies to development applications made pursuant to the *Integrated Planning Act 1997* planning schemes. It is proposed to retrospectively amend this section so it applies to development applications made pursuant to:

- *Integrated Planning Act 1997* planning schemes, for a material change of use requiring impact assessment; and
- transitional planning schemes or interim development control provisions that under the now repealed *Local Government (Planning and Environment) Act 1990* would have required public notification.

Amendment of s.3.2.2 (Approved material change of use required for certain developments)

Section 3.2.2 of the *Integrated Planning Act 1997* deems that a material change of use application has been made where:

- the development applied for could not be used without a development permit for the material change of use;
- a development permit does not exist for the material change of use; and
- an application has not been made for the material change of use.

It is proposed to amend the section to clarify that it applies "*at the time when an application is made*".

It is also proposed to replace the word "*development*" with "*a structure or works*". This is a contextual change given that development, in terms of the *Integrated Planning Act 1997*, is an action whereas the section is interested in the result of the action.

Amendment of s.3.2.3 (Acknowledgment notices generally)

The purpose of acknowledgment notices is to advise applicants:

- that their application has been received;
- of the elements of the development approval sought;
- of the referral agencies for the application;
- whether the application requires code or impact assessment;
- of the public notification requirements for the application;
- whether the local government will be making an information request; and
- whether referral coordination is required.

An assessment manager has power under section 3.3.6 (Information requests to applicant (generally)) of the *Integrated Planning Act 1997* to make an information request to an applicant if they believe further information is necessary to assess an application.

It is proposed to amend section 3.2.3 of the *Integrated Planning Act 1997* to clarify that if an assessment manager advises an applicant in an acknowledgment notice that it does not intend to make an information request, this notification does not limit the ability of the chief executive to make an information request, should referral coordination be necessary.

Amendment of s.3.2.8 (Public scrutiny of applications)

Section 3.2.8 of the *Integrated Planning Act 1997* requires that an assessment manager keep an application and any supporting material available for inspection. However, the section does not apply to the following supporting material to an application:

- sensitive security information; or
- other information not reasonably necessary for a third party to access for the purpose of evaluating or considering the effects of a development.

It is proposed to amend the definition of **supporting material** in subsection (3) from 1 July 2000 to include any information request for the application.

Amendment of s.3.5.3 (References in div 2 to codes, planning instruments, laws or policies)

Section 3.5.3 of the *Integrated Planning Act 1997* states that for the purpose of the division, references to a code, planning instrument, law or policy is a reference to a code, planning instrument, law or policy in effect when an application was made. However, section 3.5.6 (Assessment manager may give weight to later codes, planning instruments, laws and policies) of the *Integrated Planning Act 1997* which is within the division allows assessment managers to give weight to code, planning instrument, law or policy that came into effect after an application was made.

It is proposed to amend this inconsistency by making the section apply to all sections in the division other than section 3.5.6 (Assessment manager may give weight to later codes, planning instruments, laws and policies) of the *Integrated Planning Act 1997*.

Amendment of s.3.5.35 (Limitations on conditions lessening cost impacts for infrastructure)

Section 3.5.35 of the *Integrated Planning Act 1997* provides an exception to the requirement of section 3.5.32(1)(b) (Conditions that cannot be imposed) of the *Integrated Planning Act 1997* that conditions must not require a monetary payment for the capital, operating and maintenance costs of, or works to be carried out for, community infrastructure. Such a contribution may be required in three situations:

- Firstly, for development that is inconsistent with:
 - the form or scale of development under a planning scheme; or
 - the timing of infrastructure under the planning scheme.
- Secondly, to lessen the costs impacts for:
 - State schools;
 - public transport;
 - State controlled roads;
 - police or emergency services; or
 - a development infrastructure item (see section 5.1.1 (Meaning of "development infrastructure item") of the *Integrated Planning Act 1997*) such as water and sewerage infrastructure.

- Thirdly, having regard to guidelines approved by the chief executive about the method of calculating cost impacts.

It is proposed to amend this section to correct a contextual error in the use of the word "development". As development, in terms of the *Integrated Planning Act 1997*, is an action it is proposed to replace it where appropriate with the words "lots, works or uses".

It is also proposed to amend this section to make it clear that only the entity responsible for infrastructure can require that a condition be imposed to lessen the cost of that infrastructure. For example, a local government could not require a payment from an applicant to lessen cost impacts related to the provision of police or emergency services infrastructure.

Amendment of s.3.6.3 (Effect of direction)

Section 3.6.3 of the *Integrated Planning Act 1997* requires that if the Minister gives an assessment manager a direction, the assessment manager must comply with the direction.

The section currently repeats the directions that the Minister may make that are listed in section 3.6.2(1) (Notice of direction) of the *Integrated Planning Act 1997*. It is proposed to simplify the section by deleting this repetition.

Amendment of s.3.7.4 (Plan for reconfiguring that is not assessable development)

The reconfiguration of a building is exempt development pursuant to schedule 8 of the *Integrated Planning Act 1997*. Whilst the reconfiguration of a building is not assessable development under the *Integrated Planning Act 1997*, the plans for the reconfiguration must still receive local government approval under section 50(g) (Requirements for registration of plan of subdivision) of the *Land Title Act 1994*.

Section 3.7.4 of the *Integrated Planning Act 1997* currently requires that the plans for a reconfiguration that is not assessable development must be consistent with any applicable code. This is inconsistent with the concept of exempt development as exempt development does not have to comply with codes. Accordingly, it is proposed to amend this section to remove this requirement.

The amended section will facilitate the protection given to existing lawfully constructed buildings by section 1.4.4 (Lawfully constructed buildings and works protected) of the *Integrated Planning Act 1997*.

Amendment of s.3.7.8 (Application of pt 7 to acquisitions for public purposes)

Plans for the reconfiguration of lots normally require the approval of a local government. Section 3.7.8 of the *Integrated Planning Act 1997* currently provides that reconfiguration plans for the purpose of resuming land are exempted from this requirement.

It is proposed to extend the exemption to plans for the reconfiguration of land that:

- is acquired for a public purpose whether under the *Acquisition of Land Act 1967* or otherwise;
- is held for a public purpose; or
- is strategic port land.

Reconfiguration of strategic port land does not currently require local government approval and it is not intended to alter this situation.

Amendment of s.4.1.30 (Appeals for matters arising after approval given (co-respondents))

Section 4.1.30 of the *Integrated Planning Act 1997* permits an appeal to be made to the Planning and Environment Court by a person who receives notice of a decision in relation to a request to:

- extend a currency period (which is the length of an approval); or
- make a minor change to an approval (this is a change not involving conditions).

Pursuant to sections 3.5.23(10) (Deciding request to extend currency period) and 3.5.25(8) (Deciding request to change development approval (other than a change of a condition)) of the *Integrated Planning Act 1997* notice of these decisions will be given to the applicant and any concurrence agencies who gave a response in connection with the matter. Accordingly, the applicant and any concurrence agencies who gave a response will have a right of appeal against the decision.

However, the section does not currently grant a right of appeal if a decision is not made. It is proposed to amend the section to allow a person to appeal against a deemed refusal of a request.

Amendment of s.4.1.31 (Appeals for matters arising after approval given (no co-respondents))

Section 4.1.31 of the *Integrated Planning Act 1997* permits an appeal may be made by a person who receives notice of a decision in relation to a request to change or cancel:

- a condition of a development approval; or
- a condition of a development approval under section 6.1.44 (Conditions may be changed or cancelled by assessment manager or concurrence agency in certain circumstances) of the *Integrated Planning Act 1997*.

However, the section does not currently grant a right of appeal if a decision is not made. It is proposed to amend the section to allow a person to appeal against a deemed refusal of a request.

Insertion of new s.4.1.33A (Appeals against decisions to change approval conditions under the repealed Act)

Section 6.1.35A (Applications to change conditions of rezoning approvals under repealed Act) of the *Integrated Planning Act 1997* (as amended by LGOLA) permits applications to be made pursuant to the *Local Government (Planning and Environment) Act 1990* to amend conditions of rezoning approvals made under sections 2.19 (Assessment of proposed planning scheme amendment) and 4.4 (Assessment of proposed planning scheme amendment) of the *Local Government (Planning and Environment) Act 1990*.

It is proposed to insert a new section 4.1.33A in the *Integrated Planning Act 1997* to retrospectively reinstate appeal rights that existed under sections 2.19(3) and 4.4 of the *Local Government (Planning and Environment) Act 1990* against decisions on applications to change the conditions attached to rezoning approvals.

Insertion of new s.4.1.33B (Appeals against local laws)

Pursuant to section 7.1 (Appeals to the Court) of the *Local Government (Planning and Environment) Act 1990* there was a right of appeal against decisions made pursuant to local laws.

Whilst local governments may not introduce new local laws and their ability to deal with existing local laws is limited, it is proposed to insert a new section 4.1.33B in the *Integrated Planning Act 1997* to retrospectively grant appeal rights for decisions made pursuant to existing local laws.

Amendment of s 4.2.7 (Jurisdiction of tribunals)

Section 4.2.7 of the *Integrated Planning Act 1997* prescribes the jurisdiction of tribunals under the *Integrated Planning Act 1997*. It is proposed to amend this section to clarify the jurisdiction of the Building and Development Tribunal.

It is proposed that whilst the Building and Development Tribunal may decide any matter appealed to it under another Act, an appeal may only be made to the Tribunal under the *Integrated Planning Act 1997* about:

- a matter under the *Integrated Planning Act 1997* that relates to the *Building Act 1975*; or
- a matter prescribed under a regulation.

Insertion of new s.4.2.16A (Notice of appeal to other parties (under other Acts))

It is proposed to insert a new section 4.2.16A in the *Integrated Planning Act 1997* so that when an appeal is made to the Building and Development Tribunal under another Act, the registrar must notify any persons the registrar considers may be affected by the appeal within 10 business days.

Amendment of s.4.2.17 (Notice of appeal to other parties (div 3))

Section 4.2.17 of the *Integrated Planning Act 1997* requires the registrar to give notice of appeals to the Building and Development Tribunal to specified parties.

It is proposed to amend this section to:

- consolidate the notification requirements;
- require that notification be given to additional affected parties including the private certifier (if any) and any building referral agencies; and
- specify who must be notified of an appeal if the appellant is a building referral agency.

Amendment of s.4.3.2A (Certain assessable development must comply with codes)

It is proposed to amend section 4.3.2A of the *Integrated Planning Act 1997* to correct an omission.

Section 3.1.2(4) (Development under this Act) of the *Integrated Planning Act 1997* provides that where a planning scheme makes development self-assessable but schedule 8 of the *Integrated Planning Act 1997* makes it assessable development:

- codes in the planning scheme for the development are not applicable codes; but
- the codes must be complied with.

Section 3.1.6(6) (Preliminary approval may override local planning instrument) of the *Integrated Planning Act 1997* similarly provides that where a preliminary approval makes development self-assessable but schedule 8 of the *Integrated Planning Act 1997* makes it assessable development:

- codes in the preliminary approval for the development are not applicable codes; but
- the codes must be complied with.

This section currently only requires a person to comply with codes that are not applicable codes mentioned in section 3.1.2(4) (Development under this Act) of the *Integrated Planning Act 1997*. It is proposed to amend this section to extend the requirement to those codes in a preliminary approval dealt with by section 3.1.6(6) (Preliminary approval may override local planning instrument) of the *Integrated Planning Act 1997*.

Amendment of s.4.3.11 (Giving enforcement notice)

Section 4.3.11 of the *Integrated Planning Act 1997* allows an assessing authority to issue an enforcement notice if they believe a person has committed, or is committing, a development offence. If the development offence is in a local government area and the assessing authority is not the local government, they must give a copy of the enforcement notice to the local government.

To ensure that local governments' registers of enforcement notices are kept up to date, it is proposed to amend this section to require that from 1 July 2000 assessing authorities must notify local governments if they withdraw an enforcement notice.

It is also proposed to amend this section to require private certifiers acting as assessing authorities to consult with assessment managers before issuing enforcement notices.

It is proposed to make a number of other minor amendments to the text of this section to clarify that:

- private certifiers and local governments cannot delegate their power to give enforcement notices about the demolition of a building; and
- any assessing authority may give an enforcement notice for a development offence involving premises that was committed by a person who is not the owner of the premises (currently only a local government can issue such a notice).

Amendment of s.4.3.18 (Proceedings for offences)

Section 4.3.18 of the *Integrated Planning Act 1997* allows a person to prosecute a person in a Magistrates Court for a development offence.

A development offence is defined to be an offence against sections 4.3.1 (Carrying out assessable development without a permit), 4.3.2 (Self-assessable development must comply with codes), 4.3.3 (Compliance with development approval), 4.3.4 (Compliance with identified codes about use of premises) or 4.3.5 (Carrying on unlawful use of premises) of the *Integrated Planning Act 1997*. It is proposed to amend this section to allow a person to prosecute another person for any offence in Chapter 4, part 3 of the *Integrated Planning Act 1997*, not just for a development offence.

However, it is also proposed to limit the ability to prosecute certain offences in Chapter 4, part 3 of the *Integrated Planning Act 1997* to the assessing authority.

Amendment of s.4.3.26 (Effect of orders)

Section 4.3.26 of the *Integrated Planning Act 1997* prescribes the matters that an enforcement order may relate to.

It is proposed to amend this section to clarify that the court may make an enforcement order to direct a respondent to return anything to a condition that it was in before the commission of a development offence.

Amendment of s.5.1.16 (Public notice of proposed sale of certain land held in trust by local governments)

It is proposed to amend section 5.1.16 of the *Integrated Planning Act 1997* to correct a typographical error in the legislation.

Pursuant to subsections 5.1.15(1)(b) or (3) (Alternatives to paying infrastructure charges) of the *Integrated Planning Act 1997* an applicant may give land to a local government as an alternative to paying an infrastructure charge. This land is held on trust by the local government. If the local government intends to sell the land this section requires that they publicly notify the sale.

The section as it is currently drafted only refers to a local government selling land that it obtained pursuant to section 5.1.15(5) of the *Integrated Planning Act 1997*. However, section 5.1.15(5) of the *Integrated Planning Act 1997* does not relate to giving land, it merely contains criteria for the quantum of the contribution.

It is proposed to amend the section to insert a reference to section 5.1.15(1)(b) of the *Integrated Planning Act 1997*. However, this amendment will only correct one typographical error. The amendment should also omit the reference to section 5.1.15(5) of the *Integrated Planning Act 1997* and insert a reference to section 5.1.15(3) of the *Integrated Planning Act 1997*. These amendments will have to be made in another amending Act.

Amendment of s.5.2.2 (Agreements may be entered into about infrastructure)

Section 5.2.2 of the *Integrated Planning Act 1997* allows a person to enter into an infrastructure agreement with a public sector entity.

It is proposed to delete the reference to a development proposal in subsection (1)(d) so that an infrastructure agreement may be entered into where there is no development application.

Amendment of s.5.2.6 (Exercise of discretion unaffected by infrastructure agreements)

An infrastructure agreement may purport to depend on the exercise of a discretion by a public sector entity about an application. However, a public sector entity cannot fetter its discretion. This section was included to prevent an argument being made that an infrastructure agreement was invalid due to an implied fetter on the future exercise of a discretion.

It is proposed to amend section 5.2.6 of the *Integrated Planning Act 1997* to clarify that an infrastructure agreement which relies on a development approval does not have to be entered into after a development application is made.

Insertion of new s.5.2.7 (Infrastructure agreements prevail if inconsistent with development approval)

It is proposed to insert this section in the *Integrated Planning Act 1997* to clarify that to the extent that an infrastructure agreement is inconsistent with a development approval, the infrastructure agreement prevails.

Amendment of s.5.3.5 (Private certifier may decide certain development applications and inspect and certify certain works)

Section 5.3.5 of the *Integrated Planning Act 1997* sets out the scope of a private certifier's power to decide certain development applications and inspect and certify certain works. A private certifier must not decide an application until all necessary development approvals are effective for listed aspects of assessable development.

It is proposed to simplify this section by transferring the requirements of when a private certifier must not decide an application to the *Standard Building Regulation 1993*. It is proposed to delay the private certifier's decision stage until after all necessary approvals specified in the *Standard Building Regulation 1993* are effective.

It is also proposed to clarify that if a private certifier gives a development approval the private certifier may also act as the assessment manager for deciding whether:

- to extend the currency period for the approval;
- to change the approval;
- to cancel the approval; or
- to change or cancel conditions of the approval.

The amendments to this section will not commence until the *Standard Building Regulation 1993* is amended.

Amendment of s.5.3.8 (Private certifiers must act in the public interest)

Section 5.3.8 of the *Integrated Planning Act 1997* makes it an offence for a private certifier to act other than in the public interest when performing the functions of a private certifier.

Subsection (2)(b) requires that a private certifier must not act in a way contrary to a duty under the *Integrated Planning Act 1997*. It is proposed to extend this requirement to a duty of the private certifier under any other Act under which the private certifier is accredited.

The maximum penalty for an offence under this section is \$124,875.

Replacement of s.5.6.1 (Application of pt 6)

Section 5.6.1 of the *Integrated Planning Act 1997*, as it is currently drafted, restricts the operation of Chapter 5, part 6 of the *Integrated Planning Act 1997* to the activities of the Queensland Housing Commission.

It is proposed to replace this section to clarify that part 6 of Chapter 5 of the *Integrated Planning Act 1997* applies to any development for public housing.

Replacement of s.5.6.2 (Definitions for pt 6)

It is proposed to replace section 5.6.2 of the *Integrated Planning Act 1997* and define the new terms of **chief executive** and **public housing**.

Chief executive is defined as the chief executive of the department in which the *State Housing Act 1945* is administered.

Public housing is defined as housing provided by the State for short or long term use that is totally or partly subsidised by the State. It also includes services provided to the residents of the housing if it is totally or partly subsidised by the State.

Amendment of s.5.6.3 (How IDAS applies to development by commission)

Given that reference to the Queensland Housing Commission is to be removed from the *Integrated Planning Act 1997*, it is proposed to amend the heading of section 5.6.3 of the *Integrated Planning Act 1997* to replace the reference to the commission with a reference to part 6 of the *Integrated Planning Act 1997*.

Amendment of s.5.6.4 (Commission must publicly notify certain proposed development)

Section 5.6.4 of the *Integrated Planning Act 1997* currently requires that public housing developments must be publicly notified if they involve impact assessment. Whilst submissions can be made in connection with the development, no appeal rights are conferred.

It is proposed to amend this section so that public housing need only be publicly notified if the chief executive considers that the development is substantially inconsistent with the planning scheme.

It is also proposed to make a number of minor amendments to the section to:

- insert specific references to the public notification provisions that must be complied with;
- remove references to the Queensland Housing Commission; and
- permit the chief executive to consider submissions about the development.

Amendment of s.5.6.5 (Commission must advise local government about all development)

Section 5.6.5 of the *Integrated Planning Act 1997* currently requires the Queensland Housing Commission to give local governments information (for example plans) about development to which section 5.6.4 (Commission must notify certain proposed development) of the *Integrated Planning Act 1997* does not apply.

It is proposed to amend this section to replace references to the Queensland Housing Commission with references to the chief executive.

Amendment of s.6.1.1 (Definitions for pt 1)

It is proposed to amend the definitions of **applicable codes**, **assessable development** and **self-assessable development** and insert definitions of **standards** and **State land**.

The amendments to the definitions seek to achieve the following:

- **Applicable codes** – it is proposed to amend this definition to remove circularity with the definition of self-assessable development and to pick up the definition of **standards**.
- **Assessable development** – it is proposed to amend this definition to include development made assessable by a transitional planning scheme that commenced after the commencement of the *Integrated Planning Act 1997*. It is also proposed to make development on State land under a transitional planning scheme assessable development.
- **Self-assessable development** – it is proposed to amend this definition to remove circularity with the definition of applicable codes and to include development made self-assessable development by a transitional planning scheme that commenced after the commencement of the *Integrated Planning Act 1997*.
- **Standards** – it is proposed to insert this definition to shorten the definitions of applicable codes and self-assessable development and to remove circularity between them.
- **State land** – it is proposed to insert this definition to clarify the definitions of assessable and self-assessable development.

Amendment of s.6.1.30 (Deciding applications (other than under the Standard Building Regulation))

Section 6.1.30 of the *Integrated Planning Act 1997* requires that development applications under transitional planning schemes or interim development control provisions must be assessed as if the *Local Government (Planning and Environment) Act 1990* had not been repealed.

It is proposed to amend subsection (3)(d) to clarify that whilst a subdivision application involving works is to be decided pursuant to section 5.2(4) of the *Local Government (Planning and Environment) Act 1990*, the notification requirements in IDAS must still be followed.

Amendment of s.6.1.31 (Conditions about infrastructure for applications)

Section 6.1.31 of the *Integrated Planning Act 1997* allows a local government to impose a condition on a development approval relating to infrastructure as if the *Local Government (Planning and Environment) Act 1990* had not been repealed where a local government is deciding a development application under a transitional planning scheme or an Integrated Planning Act planning scheme and the local government has:

- a local planning policy about infrastructure or a planning scheme policy about infrastructure; or
- a provision, that was included before the commencement of the *Integrated Planning Act 1997*, in its planning scheme about monetary contributions for specified infrastructure.

It is proposed to amend the section to clarify that:

- regardless of the planning scheme provisions about infrastructure, infrastructure agreements may still be made under the *Integrated Planning Act 1997*; and
- if there is an inconsistency between an infrastructure agreement and the conditions of a development approval, the infrastructure agreement will prevail.

Amendment of s.6.1.32 (Conditions about infrastructure for applications under interim development control provisions or subdivision of land by-laws)

Section 6.1.32 of the *Integrated Planning Act 1997* applies where:

- a local government is deciding a development application;
- it did not have a planning scheme for an area the subject of the application at 30 March 1998; and
- it had an interim development control provision or a subdivision of land by-law at 30 March 1998 to regulate subdivision.

In these circumstances conditions for infrastructure may be imposed as if the *Local Government (Planning and Environment) Act 1990* had not been repealed.

It is proposed to amend this section to clarify that to the extent that there is an inconsistency between an infrastructure agreement and any conditions imposed under this section, the infrastructure agreement will prevail.

Omission of s.6.1.33 (Conditions about infrastructure for applications about reconfiguring a lot)

Section 6.1.33 of the *Integrated Planning Act 1997* provides that where a development application is made to a local government for the reconfiguration of a lot before 30 March 2000 and that local government has an infrastructure charges plan, then water and sewerage headworks are to be calculated pursuant to the *Local Government (Planning and Environment) Act 1990*.

The effect of the section is to restrict the ability of local governments to require contributions for water and sewerage headworks for the reconfiguration of land that was in the appropriate zone before 1 September 1985.

As the section expires on 30 March 2000 it is proposed to omit the section from that date.

Amendment of s.6.1.35A (Applications to change conditions of rezoning approvals under repealed Act)

If a person wishes to change the conditions of a rezoning approval given under the *Local Government (Planning and Environment) Act 1990* and the change cannot be made under IDAS then this section permits an application to be made under the *Local Government (Planning and Environment) Act 1990* to achieve the change.

Section 6.1.35A of the *Integrated Planning Act 1997* currently only applies to conditions of rezoning approvals under section 4.4(5) (Assessment of proposed planning scheme amendment) of the *Local Government (Planning and Environment) Act 1990*. It is proposed to retrospectively amend this section to allow conditions of approvals under section 2.19(3)(a) (Assessment of proposed planning scheme amendment) of the *Local Government (Planning and Environment) Act 1990* to also be changed.

It is also proposed to retrospectively amend this section to give a person wishing to change a condition of a rezoning approval the option of applying under either the *Local Government (Planning and Environment) Act 1990* or the *Integrated Planning Act 1997*.

Replacement of s.6.1.35B (Development approvals prevail over conditions of rezoning approvals under repealed Act)

Under the *Local Government (Planning and Environment) Act 1990*, rezoning conditions were sometimes imposed which purported to regulate subsequent development of the land. Section 6.1.35B of the *Integrated Planning Act 1997* provides that to the extent that a development approval given under the *Integrated Planning Act 1997* conflicts with a condition of a rezoning approval given under section 4.4(5) (Assessment of proposed planning scheme amendment) of the *Local Government (Planning and Environment) Act 1990* the development approval prevails.

It is proposed to retrospectively replace this section to clarify that the section applies to conditions of rezoning approvals made under either section 2.19(3) (Assessment of proposed planning scheme amendment) or section 4.4(5) (Assessment of proposed planning scheme amendment) of the *Local Government (Planning and Environment) Act 1990*.

Amendment of s.6.1.45 (Infrastructure agreements under repealed Act)

Section 6.1.45 of the *Integrated Planning Act 1997* validates infrastructure agreements made under part 6, division 2 of the *Local Government (Planning and Environment) Act 1990* and causes them to have effect as if the *Local Government (Planning and Environment) Act 1990* had not been repealed.

It is proposed to amend this section to ensure that where infrastructure agreements under the *Local Government (Planning and Environment) Act 1990* or the *Integrated Planning Act 1997* contain permission criteria, the referral arrangements in the permission criteria will prevail.

Permission criteria made under section 40 (Impact of certain local government decisions on State-controlled roads) of the *Transport Infrastructure Act 1994* or section 145(4) (Impact of certain decisions by local governments on public passenger transport) of the *Transport Operations (Passenger Transport) Act 1994* determined what aspects of a proposal needed to be referred to the Department of Main Roads.

Amendment of s.6.1.46 (Local Government (Robina Central Planning Agreement) Act 1992)

Section 6.1.46 of the *Integrated Planning Act 1997* provides that despite the repeal of the *Local Government (Planning and Environment) Act 1990*, the *Local Government (Robina Central Planning Agreement) Act 1992* applies as if the *Local Government (Planning and Environment) Act 1990* had not been repealed.

This section is currently due to expire on 31 December 2000. It is proposed to extend the duration of the section to 30 March 2003.

Amendment of sch 1 (Process for making or amending planning schemes)

Schedule 1 of the *Integrated Planning Act 1997* provides for the making of new planning schemes or the amending of existing schemes.

A local government must forward a new planning scheme or an amendment to an existing scheme to the State for a State interests check before proceeding to public notification. Currently the schedule requires the Minister to advise local governments whether or not State interests would be adversely affected by the proposed planning scheme.

It is proposed to amend schedule 1 of the *Integrated Planning Act 1997* to allow the Minister to delegate the Minister's notification requirements to the chief executive where:

- the proposal is to amend a planning scheme; and
- State interests are not adversely affected.

Amendment of sch 5 (Community infrastructure)

Schedule 5 of the *Integrated Planning Act 1997* defines community infrastructure that may be designated under Chapter 2, part 6 of the *Integrated Planning Act 1997*.

The current description of water cycle management infrastructure only applies to urban infrastructure. It is proposed to amend the description to allow the designation of land for non-urban water cycle management infrastructure such as irrigation dams.

Amendment of sch 8 (Assessable, self-assessable and exempt development)

It is proposed to amend schedule 8 of the *Integrated Planning Act 1997* to clarify that the VP reconfiguration of any land:

- acquired for a public purpose whether under the *Acquisition of Land Act 1967* or otherwise;
- held for a public purpose; or
- that is strategic port land,

is exempt development under the *Integrated Planning Act 1997*.

It is additionally proposed to amend schedule 8 of the *Integrated Planning Act 1997* to make development on strategic port land that is inconsistent with a land use plan approved under section 171 (Approval of land use plans) of the *Transport Infrastructure Act 1994* assessable development.

Amendment of sch 10 (Dictionary)

It is proposed to make a number of amendments to the definitions in schedule 10 of the *Integrated Planning Act 1997*. The amendments seek to achieve the following:

- **Assessing authority** – this definition designates assessing authorities for different types of development and consequentially who can issue enforcement notices.
- **Concurrence agency code** – this definition relates to the definition of **applicable code**. It is defined to mean a code that a concurrence agency is required by an Act to assess a development application against.
- **Superseded planning scheme** – this definition is reformatted.
- **Applicable code** – this definition is amended to remove any doubt that it applies to a concurrence agency code.
- **Deemed refusal** – this definition is amended to include deemed refusals of requests to extend currency periods and to correct a referencing error.
- **Development offence** – this definition is amended to include the new development offence in section 4.3.2A (Certain assessable development must comply with codes).

Amendments to the Integrated Planning and Other Legislation Amendment Act 1998

Omission of s.42 (Amendment of s 5.3.5 (Private certifier may decide certain development applications and inspect and certify certain works))

This amendment which has not yet commenced is proposed to be omitted given that the amendment which it seeks to make is now made by LGOLA.

Amendments to the South East Queensland Water Board (Reform Facilitation) Act 1999

Replacement of s.9 (Board to ensure transfer proceeds are paid to State)

Section 9 of the *South East Queensland Water Board (Reform Facilitation) Act 1999* provides for the proceeds of the transfer of the South East Queensland Water Board's undertaking to be paid to the State.

It is proposed to amend this section so the transfer proceeds are paid to a number of prescribed local governments in addition to the State. This amendment reflects the State's commitment to distribute a portion of the transfer proceeds to certain local governments.

Amendments to The Transport Infrastructure Act 1994

Replacement of s.172 (Strategic port land not subject to zoning requirements)

Section 172 of the *Transport Infrastructure Act 1994* currently generally excludes the operation of the *Integrated Planning Act 1997* to strategic port land.

It is proposed to amend this section to provide that whilst strategic port land is now subject to the *Integrated Planning Act 1997*, it is not subject to a planning scheme.

Omission of s.173 (Use of strategic port land to be consistent with approved land use plan)

Section 173 of the *Transport Infrastructure Act 1994* provides that a port authority must not use land in a way that is inconsistent with its land use plan without the approval of the Minister. It is proposed to omit this section given that the regulation of strategic port land is to be rolled into IDAS.

A material change of use of strategic port land that is inconsistent with its land use plan will be assessable development under the *Integrated Planning Act 1997*. The Explanatory Notes state that the *Integrated Planning Regulation 1998* will be amended to make the Minister of Transport a concurrence agency for such development.

Minor amendments

LGOLA makes a number of other minor amendments to the following Acts to correct typographical and cross-referencing errors:

- *Building Act 1975*;
- *City of Brisbane Act 1924*;
- *Integrated Planning Act 1997*;
- *Local Government Act 1993*;
- *Local Government (Chinatown and the Valley Malls) Act 1984*; and
- *Local Government (Queen Street Mall) Act 1981*.

This paper was presented at the Royal Australian Planning Institute seminar, March 2000.

Preparation of land use planning instruments: The legal and technical challenges

Ian Wright

This article discusses the legal and technical challenges of the preparation of land use planning instruments due to the *Integrated Planning Act 1997*

May 2000

Abstract: Land use planning is at a crossroads in Queensland. Land use planners have entrenched themselves at the centre of the Integrated Planning Act and as such they must deliver the "*efficiencies and quality decisions*" that IPA was touted as heralding. If they are unable to deliver, other environmental health, science and engineering professionals who are equally committed to the achievement of ecological sustainability will enter the domain of environmental and land use planning. The paper will focus on the technical and legal challenges that will be faced by practitioners in the preparation of IPA planning schemes and other environmental land use planning instruments in the future. The paper will provide a practical perspective of the issues that will be faced by practitioners and the methodologies that will have to be adopted if IPA's objective of ecological sustainability is to be achieved.

Introduction

Background

The *Integrated Planning Act 1997 (IPA)* commenced operation on 31 March 1998. IPA establishes an integrated planning framework under which land use plans are prepared in a regional context. The land use plans are called planning schemes.

The dream

The *Integrated Planning Act 1997* has been heralded by its architects as a new beginning in the history of Queensland planning. As the Minister said when introducing the:

"The Integrated Planning Bill delivers to Queensland state-of-the-art planning legislation. It will provide our State with the best performing development assessment system of any State in Australia — best performing in terms of its efficiency and the quality of the decisions it delivers."
(Hansard 1997:4086)

The reality

Unfortunately legislation, and planning legislation in particular, cannot of itself deliver efficiencies or quality decisions. If it was otherwise we would not need land use planners, local governments or indeed the public. All that we would need would be lawyers to draft planning legislation.

Fortunately IPA is not the brainchild of lawyers. IPA was conceived, structured, negotiated and drafted by land use planners. It will also be implemented by land use planners. Therefore land use planners will be able to claim the credit for IPA's successes. On the other hand they will also be held responsible for its failures.

The challenge for land use planners

However, in creating IPA, land use planners have created a piece of legislation which will challenge their profession. In the coming years, land use planners will have to significantly improve the standard of land use planning practice in this State if they are to meet the expectations of IPA. If they do not IPA will not achieve its stated objectives of delivering efficiencies and quality decisions. As a result land use planners may be slowly marginalised in the plan making process in favour of other environmental science and engineering professionals who also have a legitimate claim to the achievement of ecological sustainability.

Themes of the paper

In this paper I will explore three themes.

- First, I will seek to define some key concepts which IPA has left undefined. In doing so I will seek to identify the legal and planning basis on which IPA planning schemes should be prepared.
- Second, I will identify the legal and planning challenges that will face land use planners in the preparation of IPA planning schemes. I will also review the current state of planning practice in relation to the preparation of IPA planning schemes to see how land use planners have responded to those challenges.
- Finally, I will make some predictions about the future state of planning practice and land use planners in general in relation to the plan making process.

Preparation of planning schemes

Ecological sustainability

IPA is intended to achieve ecological sustainability (s.1.2.1). This term is defined as an end state where ecological processes and systems, economic development and human settlement are in balance (s.1.3.1).

Under IPA, ecological sustainability is to be achieved partly through the implementation of IPA planning schemes and partly through the integrated development approvals system which has been designed to ensure that the integrity of IPA planning schemes is protected.

IPA planning schemes

Under IPA, an IPA planning scheme is intended to be a blueprint for the achievement of ecological sustainability within a local government area. Whilst not being as prescriptive as the previous legislation, IPA does prescribe what is to be contained within an IPA planning scheme. In essence an IPA planning scheme is only required to contain three elements (s. 2.1.3):

- first, a set of desired environmental outcomes;
- second, a set of measures that will facilitate the achievement of the desired environmental outcomes; and
- third, a set of performance indicators by which the achievement of the desired environmental outcomes can be assessed.

Importance of planning schemes

It is important to note that desired environmental outcomes, facilitation measures and performance indicators are mandatory requirements of an IPA Planning Scheme. They are not discretionary. Apart from being a necessary component of an IPA planning scheme, desired environmental outcomes, facilitation measures and performance indicators are also significant in a number of other important respects under IPA:

- Firstly, under the integrated development approvals system a development approval cannot be granted if it would compromise a desired environmental outcome (ss.3.5.13 and 3.5.14).
- Secondly, local governments are empowered to compulsorily acquire land in order to achieve a desired environmental outcome (s.5.5.1).
- Thirdly, the performance indicators must be assessed each 6 years to determine whether the desired environmental outcomes have been achieved (s.2.2.1).

It is clear that the desired environmental outcomes, facilitation measures and performance indicators have important policy and legal implications under IPA. Accordingly, one would expect that these terms would be defined by IPA. Unfortunately, these key concepts are not defined in IPA.

Definition of key concepts

In the absence of any definition in IPA it is necessary to turn to planning theory and practice for guidance as to the intent and possible meaning of these concepts. A review of the relevant literature (set out in the reference section) indicates that these terms can be defined in the following manner:

- Desired environmental outcomes — these are the future or target benchmarks which are to be achieved in respect of the environment.
- Facilitation measures — these are the actions identified to achieve the desired environmental outcomes (ie the future or target benchmarks).
- Performance indicators — these are the characteristics of the environment which can be measured to monitor progress towards the achievement of the desired environmental outcomes (ie the future or target benchmarks).

Examples of each of these key concepts are set out in Table 1.

Table 1 Illustration of key concepts

Goal	Substantial improvement of river/marine habitat and water quality and reduction in river/harbour discharges as sewerage upgrades come on line.
Performance indicator	River/harbour discharges. Other indicators may be applied including biological oxygen demand (BOD) or diversity of fish species.
Baseline benchmarks	The level of river/harbour discharge at time <i>t</i> . The quality of water at time <i>t</i> . The variety of fish species at time <i>t</i> .
Comparative benchmarks	For an ideal river/harbour benchmarks environment, the comparative levels of discharges, BOD and diversity of fish species.
Desired environmental outcome (Target or future benchmarks)	The reduction in discharge levels by <i>x</i> , over <i>y</i> period of time, the reduction of BOD levels by <i>z</i> , over <i>y</i> period of time, increase in fish species by <i>a</i> over <i>y</i> period of time.
Facilitation measures	Upgrade sewerage system by <i>y</i> time period. Actions are similar to an output measure (ie the achievement of <i>x</i> task by <i>y</i> time for <i>c</i> cost).

These examples clearly illustrate that the drafting of desired environmental outcomes is dependent on the identification of two matters:

- first, the future or target benchmarks (ie the desired environmental outcomes) which are to be achieved; and
- second, the performance indicators which will be measured to determine whether the future or target benchmarks (ie the desired environmental outcomes) have been achieved.

The identification of desired environmental outcomes is an iterative process in which the identification of performance indicators will influence the target benchmark (or desired environmental outcome) that is chosen.

Benchmarks and desired environmental outcomes

Benchmarks are the key environmental conditions which exist for the planning scheme area at a specified time. Benchmarks are of two types:

- The first category of benchmarks is baseline benchmarks. These are the existing environmental conditions within the planning scheme area. These baseline benchmarks are established from baseline information relating to a specific time or defined area.

Baseline benchmarks may be a snapshot of actual conditions or they may be an envisaged representation of conditions intended to take account of natural climatic variability (ie they are modelled).

- The second category of benchmarks is target benchmarks. These are the future environmental conditions within the planning scheme area. In my opinion when IPA refers to desired environmental outcomes it is referring to target benchmarks. These target benchmarks are generally established by reference to comparative benchmarks derived from other similar areas or systems. However, as one would expect the applicability of comparative benchmarks is always subject to the data being comparable and compatible.

When selecting benchmarks for the purposes of a planning scheme, regard should be had to two factors:

- Firstly, benchmarks must be flexible — that is there must be the ability to add or delete benchmarks as they arise or lose importance according to the context.
- Secondly, benchmarks must be comprehensible — that is they must be capable of being measured by a set of performance indicators which are synthetic enough to make the information presented immediately comprehensible.

Turning then to the concept of performance indicators.

Performance indicators

Performance indicators are not themselves statistics, standards or criteria; rather they are a way of marshalling quantified information so as to give a synoptic view of a situation or a component of a situation which can then be assessed by reference to standards and other criteria. Therefore a performance indicator must be distinguished from the actual measure of the performance indicator.

The actual measure of a performance indicator may be based on objective or subjective data. Objective data includes data derived from physical measures and "factual" questions in surveys (eg rented or owner occupied dwellings). Subjective data is derived from survey data or individual perception attitude or opinions in a specific situation.

Objective and subjective measures of performance indicators can be used as complements to each other such as where a change in an objective measure can be compared with a subjective response. For example an improvement of ambient air quality (measured in physical terms) can be compared with the general public's perception of the change in air pollution.

Performance indicators can be either absolute or relative (see Table 2). Absolute performance indicators are designed with respect to a fixed measurement scale. Relative performance indicators on the other hand are designed in connection with a second measurement.

Each type of performance indicator is useful but a combination of indicators is often necessary to give a balanced perspective on performance. For example while total energy usage (an absolute measurement) conveys which industry consumes the most energy, energy per unit of production (a relative measurements) indicates whether the energy was used efficiently (either over time or compared to other industries).

Table 2 Type of performance indicators

Type of indicators	Definition	Typical non-financial characteristic
Absolute	Designed with respect to a fixed measurement scale	Physical indicators of mass and volume
Relative	Designed in connection with a second measurement	Production based efficiency indicators. Time based trend indicators

Performance indicators can be divided into three categories in accordance with the definition of ecological sustainability under IPA:

- *Environmental performance indicators* — these measure the quality of environmental resources such as air, water, soil.
- *Economic performance indicators* — these measure the effect of human activity on environmental resources. Examples of economic performance indicators include:
 - the consumption of water and energy resources;
 - the production and management of waste;
 - travel patterns and transport usage; and
 - urban form including infrastructure, open space and economic activity.
- *Social performance indicators* — these measure the effect of environmental resources on human activities. Examples of social performance indicators include:
 - access to amenities to meet socio-cultural and personal needs;
 - security from environmental hazards;
 - the risk of violence;
 - the risk of physical and mental health; and
 - conflicts between the quality of life and the quality of environment.

For those who may think that the identification of performance indicators and measurement criteria is too difficult a task I have set out in Appendix 1 the performance indicators and measurement criteria that have been used by the OECD in studying human settlements. I have also set out in Appendix 2 some indicative performance indicators for an urban local government.

Review of planning practice

Implications of IPA

The preceding analysis has been required because some key concepts have been left undefined by IPA. My analysis of these concepts has been based on a number of fundamental assumptions:

- Firstly, desired environmental outcomes under IPA must be more than the mere statements of objectives that were contained in strategic plans and development control plans under the old Local Government (Planning and Environment) Act. They must be target or future benchmarks that can be measured by the assessment of performance indicators.
- Secondly, desired environmental outcomes must be defined by reference to a baseline benchmark which may or may not be determined by reference to a comparative benchmark.

- Thirdly, a performance indicator is intended to measure the extent to which there has been departure from the baseline benchmark in the process of achieving the desired environmental outcome (or target benchmark).

If the assumptions underpinning my analysis of these key concepts are correct, then the implications for local government and land use planners are significant:

- First, there will have to be significant commitment by local government to the collection of data particularly in relation to:
 - the identification of baseline benchmarks; and
 - the identification of comparative benchmarks.
- Secondly, expert advice will be required from environmental science and health professionals in relation to:
 - the identification of baseline and comparative benchmarks;
 - the setting of target or future benchmarks (ie desired environmental outcomes); and
 - the identification of appropriate performance indicators.

Whether land use planners and local governments are up to the challenges presented by IPA is yet to be seen. However, based on the evidence to date the prospects for both local governments and land use planners is not encouraging.

State of the art planning schemes

To date no IPA planning scheme has been adopted by a local government. However, IPA planning schemes have been prepared by Warwick Shire Council, Maroochy Shire Council and Brisbane City Council. These planning schemes are all currently the subject of the statutory public consultation process or soon will be. The most recent of these IPA planning schemes is the Brisbane City Council's City Plan. The desired environmental outcomes and performance indicators for the City Plan are set out in Appendix 3.

Unfortunately, an analysis of each desired environmental outcome and performance indicator for the City Plan is beyond the scope of this paper. That will have to await the outcome of the many court cases that will undoubtedly arise in respect of these provisions.

However, for the purposes of this exercise, I have set out the desired environmental outcome and associated performance indicators in respect of community life, health and safety. This is a typical example of the way in which these matters have been approached in the City Plan.

"Community Life, Health and Safety

Desired Environmental Outcome

Brisbane is a safe, healthy, interesting, diverse and relaxed place to live. Its communities are relatively self-contained, with local facilities and services and recreational opportunities provided, and each has a clear sense of its distinct identity. The City's people have equitable access to a wide range of services, facilities and activities.

Performance indicators

Liveability

- *Community satisfaction with Council's planning performance.*
- *Community satisfaction with planning and development decision making (participation opportunities).*
- *Integration of non-traditional uses as Multi-purpose Centres.*

Housing diversity and choice

- *Number, type, density and location of residential development approvals, eg. proportion of medium density in emerging communities areas, including densities within 400m of major bus routes and 800m of busways and rail stations, and within walking distance of the City Centre and major Centres.*

Community facilities

- *Number, location and accessibility of new facilities such as libraries, halls and child care facilities;*
- *Hectares of parkland dedicated to Council;*
- *Hectares of parkland per head of population;*
- *Proximity of new residential dwellings to parkland.*

Landscape features/breathing spaces

- *Level of fragmentation of land in Green Space Areas.*

Cultural heritage

- *Number of heritage places listed."*

The following observations can be made about the desired environmental outcome and performance indicators extracted from the City Plan:

- Firstly, the desired environmental outcome involves multiple objectives rather than just one objective. As a result, the achievement of one objective may mitigate against the achievement of another objective thereby raising the question of whether the desired environmental outcome as a whole is supported or compromised. For example, in relation to the location of retailing facilities, the requirement for a community to be self-contained may be inconsistent with the requirement for equitable access to those facilities. The former objective might dictate that retailing services are located within a development whilst the latter objective may require that it be located outside the community in a locality that is more convenient to all residents.
- Secondly, the desired environmental outcome does not set a target or future benchmark. That is it does not set any end state or quantifiable target that is to be achieved by the end of the life of the planning scheme.
- Thirdly, the desired environmental outcome has not been set by reference to any comparative benchmark or indeed baseline benchmark.
- Fourthly, the performance indicators do not provide any basis for assessing the council's progress towards the achievement of the desired environmental outcome. For example, how can the number of heritage places listed be a measure of anything that is specified in the desired environmental outcome.

Legal and policy implications

In my opinion, the desired environmental outcomes and performance indicators specified in the City Plan are not in accordance with the words or the intent of IPA. I would like to raise a number of matters which support this view.

- First, there is no difference between the desired environmental outcomes that are stated in the City Plan produced under IPA and the statements of objectives that are currently contained in the council's Strategic Plan which was produced under the Local Government (Planning and Environment) Act. For example, the current Strategic Plan states:

"It is intended that development should retain and enhance access to basic services and facilities and the strong sense of community spirit that contribute to the liveability of Brisbane. New communities should be relatively self-contained and capable of developing a strong sense of local identity and community networks. It is desirable that the community has access to a wide range of housing (s. 3.2.3 of the Town Plan)."

This should be compared against the desired environmental outcome quoted earlier. The following statement of objective from the Strategic Plan should also be compared:

"It is intended that development will maintain and enhance the unique character and culture of Brisbane, including traditional buildings and the landscape features of the City as with the catering for the diversity of residents and their cultural associations (s. 3.2.40 of the Town Plan)."

- Secondly, unlike the provisions of the *Local Government (Planning and Environment) Act 1990*, IPA provides that development which compromises a desired environmental outcome cannot be approved even if there are good planning grounds to justify the development. That is, under IPA the consequences of non-compliance with a desired environmental outcome are fatal for a development application. Despite this the legal test (ie the written words) against which a development must be assessed under IPA is even more rubbery than that which was specified under Strategic Plans and Development Control Plans produced under the *Local Government (Planning and Environment) Act 1990*.
- Thirdly, at the end of the six year period when the council is required to review its planning scheme, one would have to seriously question whether the council will be in a position to know whether it has achieved the desired environmental outcome or not. It is difficult to see how any assessment of the performance indicators will demonstrate that the desired environmental outcome has been achieved.
- Finally, it cannot be seriously argued that the council could compulsorily acquire land under IPA on the basis that the land is necessary to achieve a "*safe, healthy, interesting, diverse and relaxed place to live*". The power to compulsorily acquire the property of a citizen must be more objectively based than this. If the law were otherwise, a local government could effectively acquire land for any purpose.

For these reasons I do not believe that the desired environmental outcomes and performance indicators set out in the City Plan satisfy the legal requirements of IPA. Also in my opinion they do not represent "*best practice*" planning and will not in my opinion assist in the achievement of IPA's purpose of ecological sustainability.

It should not be interpreted from this analysis that I consider the draft planning schemes for Warwick Shire Council to be any better or worse. In my opinion it suffers from the same criticisms.

It is also significant to note that Brisbane City is the biggest and most well-resourced local government in Australia. If this is the best that can be done then one would have to seriously question the future of IPA and those land use planners who have stacked their careers on it.

The future

In closing, the land use planning profession is at a cross roads. Having well and truly tied their horse to the IPA bandwagon the land use planners must deliver the "*efficiencies and quality decisions*" that were professed to come from IPA. If not, then an uncertain future lays before them.

If land use planners are unable to deliver the state-of-the-art planning that is required by IPA then I make the following predictions:

- Firstly, it will be the land use planners and not the environmental planners, scientists and engineering professionals, lawyers and other miscellaneous hanger-ons who will be held accountable for IPA's failings.
- Secondly, with the removal of the statutory monopoly of land use planners over the plan making process, other environmental science and engineering professionals who are equally committed to the achievement of ecological sustainability will enter the domain of the land use planner. These professionals have the technical skills to measure, plan and implement ecological sustainability. With these skills already in hand it is not such a great step to commence the preparation of a planning scheme that will achieve IPA's purpose.
- Thirdly, land use planners will become marginalised from the plan making process as their role becomes limited to that of a project manager of the integrated development approvals system.

In summary, IPA provides land use planners with the opportunity to secure their professional future. It also provides the seeds for the marginalisation of land use planners from the plan making process. Only time will tell whether land use planners are up to the challenge or whether they are overtaken by other environmental science and engineering professionals. May the force be with them. At least one thing is for certain, they will not be overtaken by planning lawyers.

References

Adriaanse, A. (1994) The Development of Environmental Policy Performance Indicators in the Netherlands, A paper presented for a visit of Australia, March, Ministry of Housing, Spatial Planning and the Environment, The Netherlands.

Alexandra, J; Higgins, J and White, T (1998) Environmental Indicators for National State of the Environment Reporting-Local and Community Uses, Environment. Australia, Canberra.

Australian Bureau of Statistics (1996) *Australians and the Environment*, AGPS, Canberra.

Australia and New Zealand Environment and Conservation Council (1998) Core Environmental Indicators for the reporting on the State of the Environmental, Environment, Australia, Canberra.

Bell Planning Associates, Gaston, G (1995) *Crime, Safety and Urban Form*, AGPS, Canberra.

Brisbane City Council (1999) *Draft Brisbane City Plan*, Brisbane City Council, Brisbane.

Brisbane City Council (1987) *The Town Plan for the City of Brisbane*, Brisbane City Council, Brisbane.

Commonwealth Commission of Inquiry Shoalwater Bay, Capricorn Coast Queensland (1993) *The Commissions Processes and Procedures*, AGPS, Canberra.

Commonwealth Environment Protection Agency (1992) Development of a National State of the Environment Reporting System, Discussion Paper, CEPA, Canberra.

Commonwealth Environment Protection Agency (1993) — *Development of a National State of the Environment Reporting System*, Proceedings of Consultative Workshop 10-11 February 1993, (mimeo), CEPA, Canberra.

Commonwealth of Australia (1986) *State of the Environment of Australia*, Department of Arts, Heritage, and Environment, AGPS, Canberra.

Commonwealth of Australia (1992) *National Strategy for Ecologically Sustainable Development*, AGPS, December, Canberra.

Commonwealth of Australia (1994) *State of the Environment Reporting: Framework for Australia*, Department of the Environment, Sport and Territories, Canberra.

Ecologically Sustainable Development Steering Committee (1993) *Summary Report on the Implementation of the National Strategy for Ecologically Sustainable Development*, Prime Minister & Cabinet, Canberra.

Ecologically Sustainable Development Working Groups (1991) *Final Report — Executive Summaries*, AGPS, Canberra.

Ecologically Sustainable Development Working Groups (1991) *Final Report— Transport*, AGPS, Canberra.

Fox, KA (1987) *Environmental Quality in a New System of Social Accounts*, Archibugi and Nijkamp (eds) *Economy and Ecology: Towards Sustainable Development*, Dordrecht/London, Kluwer Ac Publ 189-203.

- Great Barrier Reef Marine Park Authority (1995) *Our Sea, Our Future, Major Findings of the State of the Marine Environment Report for Australia*, Department of Environment, Sport and Territories, Canberra.
- Kuik, O. and Verbruggen, H. (1991) *In Search of Indicators of Sustainable Development*, Kluwer Academic Publishers, Dordrecht:
- Liverman, DM, Hanson, ME, Brown, BJ, Meredith Jr, RW (1988), *Global Sustainability: Towards measurement, Environmental Management* Vol. 12, no.2, pp. 133-143.
- Mega, V. (1994) *Sustainability Indicators for European Cities*, Paper presented by Voula Mega, European Foundation for the Improvement of working and living conditions, Dublin, at *Indicators for Urban Policies*, OECD Conference, Rennes, France 3-4 April 1995.
- Maroochy Shire Council (1999) — *Draft Strategic Plan Amendments*, Maroochy Shire Council.
- Murray-Darling Basin Commission (1993) *Guidelines for the Collection and Description of Natural Resources Data for Geographic Information Systems*, Murray-Darling Basin Commission, Sydney.
- National Capital Authority (1996) *Towards Best Practice Planning for Improved Urban Management*, Australian Government Publishing Service, Canberra
- National Local Government Environmental Resource Network, CRES and DI RD (1994) *A toolkit of strategies*, an integrated environmental management manual, Department Housing and Regional Development, Canberra.
- OECD (1993) *OECD Core Set of Indicators for Environmental Performance Reviews*, Environment Monographs 83, Synthesis report by the Group on the State of the Environment (mimeo) OECD, Paris.
- OECD (1978) *Urban Environmental Indicators*, OECD Publications Centre, Washington.
- Opschoor, H, and Reijnders, L (1991) *Towards Sustainable Development Indicators*, Kuik, O. and Verbruggen, H (eds) (1991) *In Search of Indicators of Sustainable Development*, Kluwer Academic Publishers, Dordrecht.
- ten Brink, B (1991) *The AMOEBA approach as a useful tool for establishing sustainable development*, Kuik O. and Verbruggen H. (eds) (1991) *In Search of Indicators of Sustainable Development*, Kluwer Academic Publishers, Dordrecht.
- Queensland Department of Communication and Information Local Government and Planning (1999) *IPA Implementation Note No. 13 — Desired Environmental Outcomes*, Brisbane.
- Resource Assessment Commission (1992) *Multi-Criteria Analysis: A Resource Assessment Tool*; Pine Printers Pty Ltd, Canberra.
- Thorman R. (1995) *Suggested Framework for Preparing Regional Environmental Strategies: Draft Guidelines*, Australian Local Government Association, Canberra.
- Vos, JB, Feenstra, JF, de Boer, J, Braat, LC van Baalen J (1985) *Indicators for the State of the Environment, R-85/1*, Institute of Environmental Studies, Free University, Amsterdam. *Warwick Shire Council (1999) Planning Scheme*, Warwick Shire Council, Warwick.
- Young, C. (1991) *Population Growth and Australian Cities*, ANU Canberra p.13.

APPENDIX 1

EXAMPLES OF PERFORMANCE INDICATIONS AND MEASUREMENT

CRITERIA USED BY THE OECD

Benchmark	Purpose	Performance Indicator	Measurement of Performance Indicator
1.1 Housing – Indoor Spaces	This benchmark is intended to reflect the level of crowding.	Percentage of dwelling units with less than X persons per room.	<p>Definition: For each dwelling unit, divide the number of persons by the number of rooms. Calculate the percentage of all dwellings where the number of persons per room is less than "X".</p> <p>Population: all residents, including children.</p> <p>Rooms: all rooms in dwelling units, including kitchen over 6 sq.m.</p> <p>X: for example 0.5, 1.0, 1.5.</p>
1.2 Housing – Outdoor Space	This benchmark is intended to reflect two concepts. First, the space available to the household outside the dwelling (as a contrast to the crowding inside). Second, the intensity of use of the resident land area.	Percentage of population living in an area with net density of more than X persons per km ² .	<p>Definition: First, define the predominantly residential areas of the city (as opposed to industrial, commercial areas, etc). Then, within each of these residential areas define sub-areas which are bounded by major transportation routes (eg roads, railways, canal) or major physical features (eg rivers). For each sub-area calculate the resident population (P) and the area (A) in km².</p> <p>Net density = P/A persons per km².</p> <p>Population: all residents, including children.</p>
1.3 Housing – Amenities and Sanitation	This benchmark is intended to reflect the level of provision of facilities which are available to the dwelling occupants within the dwelling and which are part of the dwelling fixtures.	Percentage of dwellings with a private bath or shower.	<p>Definition: Calculate number of dwellings with at least one amenity and express as a percentage of all dwellings. Private bath or shower: should be permanently fixed inside the dwelling unit for the exclusive use of the dwelling occupants.</p>
1.4 Housing – Security of Tenure	This benchmark relates to the advantages and disadvantages of dwelling ownership in contrast to dwelling occupation. It reflects freedom from the threat of eviction, but it is intended to do more than that. It is a housing concern which should also reflect housing choice.	Percentage of owner-occupying households (including owners of long leases).	<p>Definition: Calculate number of dwellings with owner-occupation tenure arrangements and express as a percentage of all dwellings in the urban area.</p> <p>Owner-occupiers: Occupiers of the dwelling unit who possess the freehold interest in the dwelling, including those cases where a mortgage is being paid off either directly or through co-operative arrangement, and also including holders of long leases with ten or more years to run.</p>

Benchmark	Purpose	Performance Indicator	Measurement of Performance Indicator
<p>1.5 Housing – Costs and Access to Housing</p>	<p>This benchmark covers the ease with which households may acquire accommodation. Ideally this would be in both financial and in non-pecuniary terms although the latter are the more difficult to measure.</p>	<p>Percentage of households spending less than X percent of their income on a specified type of housing.</p>	<p>For owner occupiers (including long term leaseholders) the calculation of cost is more difficult to make because of the household's "equity" or wealth locked into the dwelling. The required measure is:</p> $\text{Percentage (B)} = \frac{t.p \times 100}{y + (t.P-M)}$ <p>Where:</p> <p>P = Market value of the dwelling</p> <p>Y = Gross household income</p> <p>M = Household's annual mortgage repayments after any tax relief</p> <p>t = Mortgage interest rate</p> <p>Then calculate the weighted average of renters' and owner-occupiers' expenditure on housing as a percentage of household income, thus:</p> <p>Weighted average = a.A + b.B</p> <p>For indicator</p> <p>Where:</p> <p>a = proportion of rented dwellings in the urban area.</p> <p>b = proportion of owner occupied dwellings in the urban area</p> <p>(a + b) = 1</p> <p>X : for example below 20%, 20-30%, over 30%</p>
<p>2.1 Accessibility and Quality of Commercial Services</p>	<p>This benchmark focuses on the physical attributes of commercial services, ie their level of provision for a given population.</p>	<p>Percentage of population with access to food store within "X" metres.</p>	<p>Definition: Food store is a permanent shop which offers the most important groceries (eg milk, bread, butter, eggs, meat, fruit and vegetables).</p> <p>X : for example 400, 800, 1200, 2400 metres</p>
<p>2.2 Accessibility and Quality of Health Services</p>	<p>This benchmark focuses on the physical attributes of health services (particularly non-emergency services).</p>	<p>Percentage of population with access to a medical doctor within "X" metres.</p>	<p>Definition: for example 800, 1600, 2400 metres.</p>

Benchmark	Purpose	Performance Indicator	Measurement of Performance Indicator
2.3 Accessibility and Quality of Educational Services	This benchmark focuses on the physical attributes of educational services.	Percentage of pupils with access to a primary school within "X" minutes or metres.	<p>Definition: Primary schools include public and private schools. Children are presumed to walk to the nearest school unless they are assigned to "specific schools". Time distance should correspond to their actual mode of transport (walk, bus...). The percentage of pupils must be computed out of the number of registered pupils in primary schools.</p> <p>X : for example 15 minutes (on foot or by bus), 800 metres.</p>
2.4 Accessibility and Quality of Recreational Services	This benchmark focuses on the physical attributes of recreational services.	Percentage of population with access to public open space within "X" metres.	<p>Definition: Public open space is defined as an area:</p> <ul style="list-style-type: none"> (i) without residential, commercial or industrial use; (ii) accessible to all residents; (iii) with a minimum size of 5000m²; and (iv) which serves in a broad sense for active and passive recreational purposes. <p>X : for example 800, 1600, 2400 metres.</p>
2.5 Accessibility and Quality of Transport Services	This benchmark is divided into the service and accessibility aspects.	Ratio of the number of persons killed or injured in a road accident to the total population over one year.	<p>Definition: Persons considered in this case are drivers, passengers, motorcyclists, cyclists and pedestrians. Only road accidents reported by the police are taken into account. They may involve both private and public transport vehicles.</p>
		Percentage of population with access to an urban public transport stop within X metres (eg X - 400, 800 metres).	<p>Definition: Identify public transport stops, identify catchment areas of these stops (respectively 400m, 800m), calculate population living in catchment area and its ratio to total urban population.</p>
2.6 Accessibility and Quality of Protective Services	This benchmark focuses on the physical attributes of protective services.	Percentage of dwelling units totally destroyed by fire over one year.	
2.7 Accessibility to and safety of employment	This benchmark focuses on the physical attributes of employment.	Percentage of all employed persons living X minutes from their place of work (using usual mode of transport at usual time).	<p>Definition: Travel time is the average of morning and evening travel times and is door-to-door.</p> <p>X : for example 10, 20, 30 minutes.</p>

Benchmark	Purpose	Performance Indicator	Measurement of Performance Indicator
2.8 Natural Environment – Air Quality	This benchmark focuses on the exposure of man to air pollution.	<p>Percentage of residential population living in areas with outdoor concentrations:</p> <ul style="list-style-type: none"> (i) of sulphur dioxide in excess of $60\mu\text{g}/\text{m}^3$ (annual average); and/or 2 per cent of the observations being above $200\mu\text{g}/\text{m}^3$ (24 hourly value); and/or (iii) and/or particulate matter in excess of $40\mu\text{g}/\text{m}^3$ (annual average) and/or 2 per cent of the observations being above $120\mu\text{g}/\text{m}^3$ (24 hourly value). 	<p>Definition: No standard technique of measurement is here recommended, but the technique used should be indicated. The recommended procedure of calculation is as follows:</p> <ul style="list-style-type: none"> (i) choose sampling sites in the urban areas; (ii) identify areas where one of the above levels or both of them are exceeded; (iii) evaluate the residential population living in these areas as a percentage of the total urban population. <p>As far as possible, measurement should be on a continuous basis throughout the year. Where this is not possible, the measurement period should be stated.</p> <p>The levels specified above are for illustrative purposes.</p>
3.2 Water Quality	This benchmark is subdivided in two sub-concerns: quality of potable water supply and quality of recreational or amenity water.	<p>Percentage of population concerned multiplied by the number of days when water supplied is below the following standards:</p> <ul style="list-style-type: none"> (i) when water contains E.Coli in a 100ml sample; (ii) when water has an objectionable taste or colour. 	<p>Definition: Calculation could be done yearly on the basis of the current samples and with a corrective factor of $365/\text{number of days with sample}$.</p>
		<p>Percentage of area (short length) of recreational waters within urbanised area (or within a zone of diameter twice that of urbanised area) per 1,000 inhabitants where water quality allows:</p> <ul style="list-style-type: none"> (i) swimming; (ii) other water sports: fishing, boating; (iii) visual amenity. 	<p>Definition: Recreational waters includes natural lakes, rivers, sea and man-made expanses of water such as canals, artificial lakes and some reservoirs where quality of water is not under special control.</p> <p>Disregard small rivers and ponds (eg less than 10 metres average width, less than 2 ha in area).</p> <p>Target area: urbanised area and its environs, the latter being a zone drawn around the basic target area of width equivalent to the average "radius" of the basic target area.</p> <p>"Allows" assumes criteria which might be taken as the WHO standards for recreational water, or as a proxy transparency (measured by Secchi disc), 1m and 2m deep.</p>

Benchmark	Purpose	Performance Indicator	Measurement of Performance Indicator
3.3 Natural Environment – Exposure to Noise	This benchmark is subdivided in two sub-concerns: effect on daytime activities and effect on night time activities.	Percentage of residential population in areas with levels of outdoor noise expressed in terms of Leq in excess of: <ul style="list-style-type: none"> (i) 75 dBA, (ii) 65 dBA; (iii) 55 dBA; and (iv) 45 dBA, over the period 6-22h.	The recommended procedure is as follows: <ul style="list-style-type: none"> (i) identify, on the basis of existing information and particularly noise maps, the areas and dwellings where the above levels are exceeded; (ii) evaluate the residential population living in these areas and dwellings as a percentage of the total urban population. The sample characteristics (over space and time) should be provided. A sample of weekdays is recommended. Mention should be made whether the Leq was measured directly or computed using appropriate models. The levels specified above are for illustrative purposes.
		Percentage of residential population in areas with levels of outdoor noise expressed in terms of Leq in excess of: <ul style="list-style-type: none"> (i) 55 dBA, (ii) 45 dBA, and (iii) 35 dBA over the period 22-6h.	Definition: Same as for indicator above. Information available for L1 (noise level attained during 1 per cent of the time). The levels specified above are for illustrative purposes.
3.5 Natural Environment – Exposure to Natural Hazards	This benchmark focuses upon the consequences of such phenomena rather than the phenomena themselves.	Annual average percentage of dwellings made permanently uninhabitable due to natural disasters such as landslides, subsidence, floods, high wind or earthquakes during the past 50 years.	The annual average percentage of dwellings is the sum of the annual percentage of dwellings for each of the past 50 years divided by 50.
3.6 Weather Conditions	This concern influences human perception of the quality of life, and covers temperature, precipitations and sunshine.	Number of heating degree days (and cooling days) per year.	Sum over a year of the daily positive (and negative) differences between a specific temperature level (such as 18° C) and the mean daily temperatures above (and below) the reference level.

Benchmark	Purpose	Performance Indicator	Measurement of Performance Indicator
		<p>Average monthly amount of precipitation:</p> <p>(i) for six summer months;</p> <p>(ii) for six winter months,</p> <p>over a five year period.</p> <p>Average number of hours of sunshine</p> <p>(i) over six summer months;</p> <p>(ii) over six winter months,</p> <p>over a five year period.</p>	
<p>3.7 Natural Environment – Land Quality</p>	<p>This concern relates to the aesthetic quality of urban land.</p>	<p>Percentage of urban area vacant or abandoned.</p>	<p>Definition: "<i>Vacant land</i>" is land allocated for development or redevelopment. "<i>Abandoned land</i>" is land which has been developed, but which is no longer being used.</p>

APPENDIX 2

INDICATIVE PERFORMANCE INDICATIONS FOR AN URBAN LOCAL GOVERNMENT

Performance Indicators	Type	Measurement of Performance Indicator
1. Leisure Qualities	Social	Playgrounds, sportsgrounds, bathing establishments/resident (m ²) Parks, grounds/resident (m ²) Vegetated areas/resident (m ²) in x minute zone Cinemas and places of amusement/resident (m ²) Restaurants, hotels, boarding houses/resident (m ²)
2. Housing Qualities	Social	Gross floor areas for housing/resident (m ²) Households with more/less rooms than people (%) Empty dwelling units/all dwelling units (%) Dwelling units with A/c or heating/all dwelling units (%) Average noise level (dBA) Average air pollution (SOT content ppm) Average rent level/household income (%) Price index ratio for dwelling units in the planning area/Adjoining areas (%)
3. Educational Qualities	Social	Preschools and kindergarten spaces/children under preschool age (%) Children/kindergarten Primary school children/class Secondary school children/class University students/class Theatre and civic centre space/resident (m ²) Museum and libraries space/resident (m ²)
4. Sensational Qualities	Social	Density of gross floor areas Density of population Old - Age coefficient Proportion of immigrants (%)
5. Consumer Qualities	Social	Short term sales space/resident (m ²) Long term sales space/resident (m ²) CPI for planning scheme area/CPI for Qld Other services space/resident (m ²) Shopping areas free of private traffic/total shopping areas (%) Time free of overlap between shopping and work (h)
6. Qualities of Employment	Social	Personal income/resident/Qld residents Tax rate of the planning scheme area/Tax rate for other Qld local governments Density of employment

Performance Indicators	Type	Measurement of Performance Indicator
7. Health Qualities	Social	Medical consulting space/resident (m ²) Hospital space/resident (m ²) Welfare space/resident(m ²)
8. Traffic Qualities	Economic	Proportion of housing space accessible by public transport in X min (%) Proportion of housing space accessible by private transport in X min (%) Proportion of sales space accessible by public transport in X min (%) Proportion of sales space accessible by private transport in X min (%) Proportion of office space accessible by public transport in X min (%) Proportion of office space accessible by private transport in X min (%) Proportion of product space accessible by public transport in X min (%) Proportion of product space accessible by private transport in X min (%) Price ratio of public transport to private transport
9. Space Market Qualities	Economic	Tertiary space/employees (m ²) Secondary space/employees (m ²) Empty tertiary space/total space (%) Empty secondary space/total space (%) Index rents for business specific for planning scheme area/surrounding local governments
10. Context Qualities	Economic	Telephones/resident Number of faxes/resident Number of computers/resident
11. Resources Extracted Harvested and Renewed	Economic	Volume of actual harvest/fish/catches Proportion of feed stock from sustainable sources Size of spawning stocks Expenditures for renewal of resources (reforestation, fish stock monitoring)
12. Pollution Prevention	Economic	Expenditure on improved technologies Number of facilities converted to new technologies Percentage of recycled materials used in operations Level of employee training to handle hazardous substances
13. Solid Waste Management	Economic	Total volume of solid waste Percentage waste classified by method of disposal (incineration, land fill, reuse, recycle) Total waste handling costs

Performance Indicators	Type	Measurement of Performance Indicator
14. Hazardous Waste Management	Economic	Volume of hazardous waste generated Toxicity and persistence rating of wastes Reduction in the volume of hazardous substances used in operations Total waste handling costs
15. Energy Conservation	Economic	Energy efficiency index (industry/resident benchmarks, per unit of production) Emissions of CO2/SO2 related to energy consumption Total energy used Expenditures on energy efficiency, alternative energies
16. Environmental Monitoring	Economic	Number of audits performed and coverage of facilities (by type of audit)
17. Environmentally Responsible Products/Services	Economic	Percentage of product content that is recyclable Volume of recycled material used in products/packaging
18. Protecting Habitat and Wildlife	Environment	Numbers of wildlife habitats/migration disturbed or plants damaged within the planning scheme area Percentage of habitats in planning scheme area
19. Land Disturbed and Restored	Environment	<ul style="list-style-type: none"> • Erosion risk factor • Degree of top soil losses • Area of land lost to production • Restored/reclaimed area/total land distributed (%)
20. Air Pollution	Environment	Volume of emissions of pollutants eg: <ul style="list-style-type: none"> • Greenhouse gases – CO2, CH4, N2O • Acidification – SOx, N • Consumption of ozone depleting substances – CFC, halons • Particulate
21. Water Pollution	Environment	Volume of discharges: <ul style="list-style-type: none"> • Nitrogen • Phosphate • Heavy metals • Organic compounds BOD/COD/TSS of discharges in water Weighted index of effluents (eg toxicity and persistence rating of pollutants) Concentration of heavy metals and organic compounds in environmental media and living species Total water treatment costs

APPENDIX 3

ENVIRONMENTAL OUTCOMES AND PERFORMANCE INDICATORS OF THE BRISBANE CITY COUNCIL CITY PLAN

Community life, health and safety

Desired environmental outcome

Brisbane is a safe, healthy, interesting, diverse and relaxed place to live. Its communities are relatively self-contained, with local facilities and services and recreational opportunities provided, and each has a clear sense of its distinct identity. The City's people have equitable access to a wide range of services, facilities and activities.

Performance indicators

Liveability

- Community satisfaction with council's planning performance.
- Community satisfaction with planning and development decision making (participation opportunities).
- Integration of non-traditional uses as Multi-purpose Centres.

Housing diversity and choice

Number, type, density and location of residential development approvals, eg proportion of medium density in emerging communities areas, including densities within 400m of major bus routes and 800m of busways and rail stations, and within walking distance of the City Centre and major Centres.

Community facilities

- Number, location and accessibility of new facilities such as libraries, halls and child care facilities.
- Hectares of parkland dedicated to council.
- Hectares of parkland per head of population.
- Proximity of new residential dwellings to parkland.

Landscape features/breathing spaces

Level of fragmentation of land in Green Space Areas.

Cultural heritage

Number of heritage places listed.

Land use and built environment

Desired environmental outcome

Brisbane's land use pattern and built environment promote its unique character and encourage a sustainable network of Residential Areas, Centres, employment and transport links.

Performance indicators

Character dwelling protection

The rate of character dwelling removal, including:

- Number removed by locality.
- Number of refusals for removal.
- Number of successful appeals that uphold policy.

Centres and employment

The proportion of commercial approvals in-Centre compared with out-of-Centre (see also performance indicators for Economic development).

Access and mobility

Desired environmental outcome

Brisbane has a sustainable transport system that promotes a more compact and efficient urban structure and accommodates commercial and industrial traffic effectively. It enables residents, visitors and people doing business to travel safely, economically, equitably, comfortably and conveniently while minimising impacts on the environment through less reliance on private vehicles.

Performance indicators

Containment of sprawl

- Dwelling starts/completions by density and area.
- Rate of change of developed land compared with population growth.

Public transport accessibility

Proportion of people living within 400m of a stop on a major bus route or 800m of a busway or rail station.

Road hierarchy

Number of access points onto major routes.

Natural environment and waterways

Desired environmental outcome

The City's environmental quality and natural assets are protected so that they contribute effectively to ecological sustainability and biodiversity.

Performance indicators

Bushland and wetland protection

- Proportion of wetland protected in accordance with the Wetland Code.
- Rate of clearing and reforestation in the Environmental Protection Area and public Green Space Areas.

Air quality

- Pressures on air quality composite index.
- Annual median highset 1-hour ozone concentrations for all ozone conducive days.
- Number of air pollutants complaints to Brisbane City Council.

Waterway protection

Proportion of waterways protected in accordance with the Waterway Code.

Waterway quality

Measurement of improvement of water quality against water quality objectives for the Brisbane River and Moreton Bay.

River front access

Kilometres of River front access / pedestrian ways.

Economic development

Desired environmental outcome

A vibrant, dynamic and sustainable economic base consolidates and promotes the City's central role in South East Queensland, the State and the Asia Pacific Region.

Performance indicators

Business and industry growth

- Number of businesses and number of new businesses established per annum, categorised by:
 - industry;
 - turnover;
 - value added (latest year).
- Expansion and diversification of existing businesses.

- Number/proportion of approved business/industries using principles of best practice environmental management.

Employment Growth

The number of jobs categorised by full time/part time, occupation, age and industry in:

- the entire city;
- the city centre;
- inner ring;
- outer ring;
- other specified major centres.

Infrastructure

Desired environmental outcome

Transport, power, water, wastewater treatment and stormwater management infrastructure are provided equitably, within the community's resources.

Performance indicators

Expenditure

- Spending across all infrastructure on per capita basis in different areas.
- State contribution to infrastructure per capita.

Contributions

- Water and sewerage infrastructure provision.
- Expenditure annually on new infrastructure and cost per person of this provision.
- Timely delivery of benchmark development sequence plans and infrastructure charges plans.

This paper was presented at the Environmental Law Association conference, May 2000.

Sustainability – The 21st Century agenda: Future directions in environmental law and policy

Ian Wright | Stuart Clague

This article discusses the environmental challenges which the 21st Century will face. It identifies past environmental law and policy trends and considers future environmental challenges which need to be addressed

May 2000

Abstract: The 20th Century presented enormous challenges for environmental practitioners. The challenges presented in the 21st Century will be even greater. This paper examines the development of environmental regulation to deal with past challenges and explores the direction of environmental law and policy in the 21st Century. Principally, it identifies "sustainability" as the fundamental goal underpinning the future development of environmental regulation. It argues that the key sustainability objectives of ecological integrity, liveability and equity will determine the shape of the next phase of environmental regulation, demanding significant changes to traditional institutional and organisational frameworks. Finally, it argues that environmental regulation in the 21st Century will present new challenges for environmental practitioners. However, for those who successfully adapt, it offers many opportunities.

Introduction

The challenges facing environmental practitioners are enormous. Many of the environmental problems associated with the modern world continue to become increasingly complex and some may be intractable.

The solutions to our current problems are as complex as the causes. Furthermore, opinions as to the appropriate solutions are as varied as the opinions regarding the nature and causes of the problems we face.

Having just entered the 21st Century, it is perhaps opportune to reflect upon the growth of environmental regulation, consider the agenda for environmental regulation in the 21st Century and the opportunities and challenges that will be presented to environmental practitioners.

This paper therefore has five themes:

- First, I will reflect upon the growth of environmental regulation over the last 30 years.
- Second, I will consider the concept of sustainability which has underpinned the growth of environmental regulation over the last 30 years and has set the agenda for environmental regulation into the first 10 years of this century.
- Third, I will consider the implications of the sustainability agenda for environmental regulation in the first 10 years of this century.
- Fourth, I will identify the organisational and institutional changes that will occur to address the sustainability agenda.
- Finally, I will identify some of the opportunities and challenges that will be presented to environmental practitioners as a result of the sustainability agenda.

Growth of environmental regulation

The history of environmental regulation is only very recent. The 1950s and 1960s saw post-war development and considerable growth in the economic environment. This was accompanied by pressures on the physical environment and the social environment which was documented in seminal works such as Rachel Carson's '*Silent Spring*' in 1962 and Garrett Hardin's '*The Tragedy of the Commons*' in 1968.

Growing community concern over the impact of the economic environment on the physical environment and the social environment inevitably lead to the development of environmental regulation. The evolution of environmental regulation has involved three distinct phases:

- The first phase was concerned with the introduction of development controls designed to regulate the development of individual projects.
- The second phase was concerned with the implementation of project life cycle controls.
- The third phase, which has only recently commenced, is concerned with resource management controls.

Development controls

The first phase of environmental regulation was implemented during the 1960s and 1970s. During this period, environmental regulation was focussed on controlling individual development projects. These legislative controls were implemented through three regulatory mechanisms:

- First, land use planning systems were established. In Queensland, this was implemented by amendments to the *Local Government Act 1936* and the introduction in 1959 of the *City of Brisbane (Town Plan) Act 1959* and its successor the *City of Brisbane Town Planning Act 1964*.
- Second, pollution control legislation was introduced which contained emission controls which typically set standards for waste discharges. In Queensland, these controls were contained in the *Clean Air Act 1963*, the *Litter Act 1971*, the *Clean Waters Act 1978* and the *Noise Abatement Act 1978*.
- Third, environmental impact legislation was introduced to require the proponents of development projects to consider environmental factors in order to avoid or mitigate adverse environmental effects and to enable government decision makers to assess whether environmental factors had been adequately addressed. At the Commonwealth level, this was implemented in 1974 by the introduction of the *Environmental Protection (Impact of Proposals) Act 1974*. In Queensland, it was implemented in 1978 by the insertion of the environmental impact assessment provisions into the *State Development and Public Works Organisation Act 1971*.

After the initial flurry of legislative activity during the 1960s and 1970s, development control legislation remained relevantly unchanged during the 1980s.

Project life cycle controls

However, with the advent of the 1990s, a second phase of environmental regulation began. The development control legislation of the 1960s and 1970s was reviewed and complemented by environmental regulation focussed on controlling the life cycle of development projects.

These project life controls were imposed through three types of regulatory mechanisms:

- First, personal licensing systems were introduced to ensure that development projects were operated in accordance with relevant development controls.
- Second, the operators of development projects were required to implement management mechanisms such as audits, environmental management plans and environmental management systems in their operations.
- Third, the decommissioning of development projects was regulated by site contamination legislation which imposed notification, auditing and remediation requirements on the operators of development projects.

In Queensland, these project life controls were implemented initially by the *Contaminated Land Act 1991* and then by the *Environmental Protection Act 1994*.

However, unlike the 1980s, the 1990s was a period of continual change. The development controls and project life cycle controls of the first two phases of environmental regulation were quickly complemented by environmental regulation focussed on resource management.

Resource management controls

The resource management legislation that was introduced towards the end of the 1990s and continues to be introduced today is focussed on providing a planning framework in which resource use issues can be resolved.

The development control and project life cycle controls of the first two phases of environmental regulation have been reviewed and integrated into planning frameworks which have as their goal the resolution of resource use issues ahead of development projects.

The resource management framework has been introduced through three regulatory mechanisms:

- First, the land use planning systems of the first phase of environmental regulation has been complemented by a regional planning system established under the *Integrated Planning Act 1997*.
- Second, the traditional end-of-pipe emission control standards established through the first phase of environmental regulation have been complemented through the management of airsheds and watersheds and the specification of ambient contaminant levels. In Queensland, this is reflected in the approach of the *Environmental Protection Act 1994* and the proposed reforms to the *Water Resources Act 1994*.
- Third, the environmental impact assessment of development projects required by the first phase of environmental regulation has been complemented by resource assessment legislation which provides for the development of resource management plans. Some recent examples include:
 - the *Vegetation Management Act 1999* which provides for regional vegetation management plans;
 - the *Coastal Protection and Management Act 1995*, as amended in 1999, which provides for regional coastal management plans;

- the *Water (Allocation and Management) Bill 1999* which provides for water allocation and management plans;
 - the *Land Act 1994* which provides for management plans for reserves;
 - the *Nature Conservation Act 1992*, as amended in 1999, which provides for management plans for protected areas.
- The relationship between the first, second and third phases of environmental regulation is summarised in Table 1 and shown graphically in Figure 2. In short, the development control legislation of the first phase has been expanded through legislation focussed on project life cycle controls in the second phase and resource management legislation in the third phase. In particular, three trends can be discerned:
 - first, land use planning legislation has been expanded through site contamination legislation for land use change and regional planning for resource management;
 - secondly, the environmental assessment of projects has been expanded by personal licensing systems requiring the licensing of the operators of development projects and by resource assessment systems requiring individual projects to be considered in the context of broader resource use issues;
 - thirdly, end-of-pipe emission control requirements have been expanded by the requirement to implement management systems in the operation of development projects and by airshed and watershed management of ambient contaminant levels.

However, before considering possible future trends in environmental regulation, it is necessary to consider the environmental policy basis that has underpinned the development of environmental legislation over the last 30 years.

Foundation of environmental regulation

Sustainability: The fundamental goal

The development of environmental regulation over the last 30 years has been founded on one fundamental goal. That is, the goal of sustainability. This goal was first articulated in the Stockholm Declaration on the Human Environment in 1972.

The goal of sustainability was subsequently elaborated by several other international environmental policy documents including the 1972 Report of the Club of Rome titled *'Limits to Growth'*, the 1980 Report on the Independent Commission of International Development Issues titled 'North-South: A Program for Survival', the World Conservation Strategy prepared by the United Nations Environment Program in 1980 and the World Charter for Nature adopted by the United Nations General Assembly in 1982.

The goal was also reaffirmed by the Nairobi Declaration in 1982 before being formally cemented as the central framework for environmental policy and regulation in the Declaration on the Environment and Development in Rio de Janeiro in 1992.

Sustainability: defined

Sustainability is the condition where the community, the natural environment and the economy are in balance. This interaction is illustrated in Figure 1.

It can be seen from Figure 1 that sustainability is concerned with the physical environment, the social environment and the economic environment.

The physical environment is where the natural environment interacts with the community. In this case, the sustainability objective is to ensure liveability. The goal of liveability is achieved when the physical environment has reached a stage where the long term health of the community and the natural environment is being maintained.

The social environment is where the community interacts with the economy. In this case, the sustainability objective is to ensure equity. The goal of equity is achieved when the social environment has reached a state where the long term health of the community and the economic environment is being maintained.

The economic environment is where the economy reacts with the natural environment. In this case, the objective is to ensure ecological integrity. The goal of ecological integrity is achieved when the economic environment reaches a state where both the long term health of the economy and the natural environment are maintained.

Sustainable development distinguished

The goal of sustainability is achieved by sustainable development. This can be defined as economic activities that use the resources of the natural environment to meet the needs of the community (now and in the future).

Sustainability is the goal whilst sustainable development is a tool for achieving sustainability. Sustainable development is not the desired goal.

Having established sustainability as the fundamental goal of environmental policy and regulation, it is necessary to consider the fundamental principles on which environmental regulation in the future will be based.

Future environmental regulation

Environmental regulation in the 21st Century will be based on the following three sustainability objectives:

- ecological integrity;
- liveability;
- equity.

Ecological integrity

The maintenance of ecological integrity is a fundamental objective of sustainability. The principle of ecological integrity will replace environmental impact assessment and become the basis for resource assessment.

The concept underlying the environmental assessment process is a trade-off between the level of environmental impact and a level of resource use. It does not determine whether the level of resource use is maintaining ecological integrity.

Ecological integrity exists where an ecosystem retains its complexity and capacity for self-organisation (that is, its health) and sufficient diversity within its structures and functions (that is, its biological diversity) to maintain the ecosystem's self-organising complexity through time (Iverson & Cornett 1994).

The principle of ecological integrity will therefore become the basis for the development of resource management plans under wider environmental legislation concerned with:

- vegetation such as the *Vegetation Management Act 1999*;
- land such as the *Land Act 1994*;
- water such as the Water (Allocation and Management) Bill;
- coastal zone such as the *Coastal Protection and Management Act 1995*; and
- protection of flora and fauna such as the *Nature Conservation Act 1992*.

Liveability

The liveability of the physical environment is also a fundamental objective of sustainability. The liveability of the physical environment is determined by its carrying capacity.

A region's carrying capacity can be defined as the maximum rate of resource use and resulting waste discharge that can be sustained indefinitely without progressively impairing the ecological integrity of the ecosystem.

However, there is no one optimal carrying capacity for any one region. Rather, a range of carrying capacities exist depending upon the community's desired environmental outcomes for the region in question.

The determination of the liveability of a region therefore requires a two stage assessment. First, an articulation of the desired environmental outcomes for a region, and second the determination of the appropriate carrying capacity measures.

The desired environmental outcomes are the future or target benchmarks which are to be achieved in respect of the physical environment.

The carrying capacity measures are the characteristics of the physical environment which can be measured to monitor progress towards the achievement of the desired environmental outcomes (that is, the future or targeted benchmarks).

The concept of carrying capacity will substantially change the approach to the land use planning by requiring the use of quantitative indicators.

Whilst the *Integrated Planning Act 1997* requires local governments to prepare planning schemes which contain desired environmental outcomes and performance indicators, land use planners have traditionally seemed unable to develop desired environmental outcomes that are capable of being measured by a set of performance indicators (that is, carrying capacity measures).

If land use planners are unable to deliver planning schemes that implement the objective of liveability, then it is likely that they will be overtaken by environmental practitioners such as environmental planners, scientists, engineers and other environmental health professionals in the plan-making process. This is a theme that I will take up in greater detail in another paper that I will be delivering to this conference.

Equity

Equity is also a key objective of sustainability. Equity is achieved where the community (both present and future) has the opportunity of the same social, physical and economic environment.

Equity is generally divided into inter-generational equity (that is, equity between generations) and intra-generational equity (that is, equity within a generation).

Inter-generational equity

The achievement of inter-generational equity will require the application of three related principles in environmental regulation:

- The first principle is the principle of irreversibility. This principle provides that any development that would result in irreversible loss of ecological integrity (that is, the health or biological diversity of an ecosystem) will not be allowed to proceed (Commonwealth of Australia 1990:9).
- The second principle is the precautionary principle. This principle provides that where there is unclear data or uncertainty, a development will not be allowed to proceed unless it is demonstrated that there is no adverse effect on ecological integrity or that any adverse effect can be reduced through preventative actions or further research at a moderate cost (Commonwealth of Australia 1990:9).
- The third principle is the principle of preventative action. This principle provides that waste discharges from the use of resources should be reborn as resources for another life through recycling and reuse. The application of this principle means that the traditional environmental quality management approach to environmental management will be replaced by the "best practical means approach". The environmental quality management approach permits waste discharges where it is within the capacity of the environment to assimilate the waste as prescribed by traditional emission controls or by more recent ambient contaminant levels. The best practical means approach on the other hand focuses on the reduction and prevention of waste discharges through the analysis and design of entire industrial processes. This can be expected to result in a variety of legislature changes in the future. For instance:
 - discharge permits may be made contingent on the prior acceptance of the results of an audit that will lead to changes such as product reformulation, process modification, input substitution, closed loop recycling, the development of clean technologies and so on. The primary objective would be the development of clean production;
 - statutory obligations to "*reduce, minimise and control*" discharges may be replaced by obligations to "*reduce and prevent*" such discharges and to adopt new processing technologies as specified by the appropriate regulatory authority;
 - requirements to undertake monitoring, scientific analysis, consultation and impact assessment may also be redirected towards reducing waste disposal, developing alternative disposal technologies in the short term and redesigning industrial processes to avoid any disposal over the longer term;
 - obligations may also be imposed to implement waste minimisation, recycling and reuse, cradle to grave management of chemicals and hazardous substances, as well as reduced consumption;
 - maximum levels of pollution entering the environment may also be prescribed. Such a "no net increase" policy would, by restraining new discharges, set the groundwork for the progressive elimination of discharges from existing sources. This would be achieved by a requirement to use the best available technology on new installations, combined with a requirement to set phase-in timetables for the reduction of pollution from existing sources (by justification procedures which could, for example, review existing waste streams). It is acknowledged that this change would be controversial in so far as it would constrain future economic growth within existing pollution levels.

A shift in the environmental protection system from the environmental quality management approach to the best practical means approach would also be accompanied by a shift from traditional command and control requirements to economic instruments that provide incentives to reduce pollution. Taxes, charges and subsidies on materials such as carbon, landfill and pollution will be imposed to internalise the cost of pollution to the polluter so as to ensure its consideration in the making of production decisions. Other measures that will be considered include the valuation and pricing of resources to properly account for environmental value, charging for the use of the environment to receive wastes, the development of property rights concepts for the environment, the development of markets for tradeable effluent permits, the introduction of bonds for environmental performance and the use of pilot or demonstration programs involving economic instruments.

Intra-generational equity

The achievement of intra-generational equity will require the application of five principles in environmental regulation:

- The first principle is the principle of environmental justice. This principle provides that a development should not be allowed to proceed where the benefits of the development flow to one group whilst the costs of the development are experienced by another group. This principle has application at the global, regional and local levels. At the global level, the greenhouse effect has resulted primarily from the activities of industrial countries, yet it is predicted to create its most serious damage in poor island countries and developing countries in Africa. At a regional scale, Australian mining companies have been involved in mines in Papua New Guinea and Hungary where downstream communities have been forced to share the burden of development without the perceived commensurate benefits. Also, at a local level, there is the practice of localising a large amount of necessary, but undesirable facilities such as sewerage treatment plants, landfills and hazardous industries in disadvantaged areas.

- The second principle is the principle of global responsibility. This principle provides that development in local areas should not be allowed to proceed where it will produce effects beyond the immediate area. This principle is being applied in the *Environment Protection and Biodiversity Conservation Act 1999* where it is provided that any development which may impact on greenhouse emissions such as wholesale land clearing will be subject to a Commonwealth environmental impact assessment and permitting process.
- The third principle is the principle of accountability. This principle provides that governments and citizens must be responsible and accountable for ensuring that their policies, programs and budgets support the concept of sustainability. This will result in the following legislative changes:
 - governments will be bound by environmental regulation to the same extent as citizens;
 - governments and corporate citizens will be assessed in terms of their environmental performance through indicators such as the Dow Jones Sustainability Index;
 - governments and corporate citizens will be required to appoint audit committees and sustainability directors and managers, undertake sustainability assessments and audits and prepare sustainability reports as part of their corporate reporting requirements;
 - governments will be subject to more open freedom of information laws, while corporate citizens will be subject to "Right to Know" legislation which will require the release of information to citizens.
- Enforcement powers will be expanded to allow increased enforcement. Examples include:
 - statutory offences will be based on strict or absolute liability such that proof of fault or intention is not required;
 - statutory defences, on the other hand, will require the defendant to demonstrate that positive steps have been taken to prevent or mitigate the impact;
 - the onus of proof will be varied such that the onus is on the defendant to prove that the element of culpability is not present rather than the plaintiff to prove that the element is present;
 - the privilege against self-incrimination will also be abrogated such that persons may be required to answer questions or produce documents that may result in the imposition of a civil penalty or the conviction for a crime;
 - penalties will also include substantial fines and prison terms for offences;
 - affected persons will also be permitted to sue violators of environmental regulation and to obtain injunctive relief and penalties in respect of breaches of those laws;
 - liability will also be imposed on directors and employees of offending corporations whose only defence may be that they have used all due diligence to prevent the commission of the offence by the corporation.
- The fourth principle is the principle of community participation. This principle provides that all sectors of the community have a right to participate and influence decisions that affect them. Environmental regulation will provide for increased community participation in the following ways:
 - rights of notification, objection and appeal will be imposed in respect of development proposals;
 - access to information will be provided through freedom of information legislation or independently;
 - rights to legal remedies and redress will also be given where the social or physical environment has been or may be seriously affected;
 - financial and technical assistance will also be provided to facilitate participation;
 - alternative dispute resolution (ADR) processes based on some formal consensus building, joint problem solving or negotiation will be mandated to complement traditional adjudication and adversarial proceedings on the basis that the outcomes of these ADR processes are more likely than court processes to produce outcomes that are more effective, equitable and stable.
- The fifth principle is the principle of stewardship. This principle provides that the social, physical and economic environments should be valued on the basis of their intrinsic value rather than upon their value to humans. This principle involves a change from an anthropocentric or human-centred approach to the valuation of the social, physical and economic environments to an ecocentric or ecological-centred approach. Environmental regulation which is based on an ecocentric approach will require the pricing of resources to take account of two costs:
 - first, the cost to the physical environment associated with resource depletion and waste discharges (including greenhouse);
 - second, the cost to the social environment associated with effects on human health and the quality of life.

A recent legislative example of this is the Council of Australian Governments Water Reform Policy which has been implemented by all State governments. Accordingly, in Queensland the *Local Government Act 1993* requires that water must be sold at a price which is based on consumption and ensures the recovery of all costs, including all environmental and social costs.

Institutional framework

The implementation of the key sustainability objectives of ecological integrity, liveability and equity in future environmental regulation will result in significant changes in traditional institutional frameworks.

Sustainability objectives will be required to be integrated into institutional frameworks. As a result, sustainability programs will be included into environmental agencies such as the Environmental Protection Agency, economic agencies such as the Department of State Development, the Department of Primary Industries and the Department of Natural Resources and community agencies such as the Department of Community Services and the Department of Emergency Services.

The institutionalisation of the key sustainability objectives into government agencies will have the following consequences:

- Firstly, the missions of these agencies will have to be extended to include the delivery of services in a manner which implements sustainability.
- Secondly, if sustainability objectives are not included in the missions of these agencies, sustainability programs will be faced with a serious and damaging conflict of interest, especially when they are organisationally included in agencies which have a mission of resource use. In the absence of a mission of achieving sustainability, these agencies may end up actually protecting or promoting the interests of those that they are charged with regulating at the expense of sustainability.
- Thirdly, there will be an increasing need to unify sustainability programs across and between levels of government by improving inter-agency coordination.
- Finally, environmental practitioners will be presented with increasing opportunities within government agencies. Those environmental practitioners who demonstrate the necessary competencies and provide leadership in implementing sustainability are ensured of a bright future. However, those environmental practitioners who identify only with traditional institutions, programs and competencies will be an endangered species who will be eking out an existence in a constantly shrinking organisational environment.

Environmental practitioners of the future

Implications of structural changes

The organisational and program restructuring that will occur in the first ten years of this century will provide significant opportunities for environmental practitioners. Many of these opportunities will involve roles that are different to those that are currently been undertaken by environmental practitioners. This has significant implications for environmental practitioners:

- First, environmental practitioners will require a broader range of competencies.
- Second, environmental practitioners will have to become more interdisciplinary in their focus.
- Third, environmental practitioners will have to choose whether they want to be leaders or followers.

Turning then to the future competencies of environmental practitioners.

Competencies

The development and training of environmental practitioners has not been a priority over the last 30 years. Accordingly there is a deficit of properly educated and trained environmental practitioners. Individuals with little or no knowledge of epidemiology, biostatistics, toxicology, public policy and risk assessment have filled key positions where such knowledge is essential.

In the coming decade, environmental practitioners will be required to be competent in the following matters:

- relevant environmental sciences such as biology, chemistry, physics, geology, ecology and toxicology;
- environmental technical issues;
- epidemiology;
- biostatistics;
- aetiology of environmentally induced diseases;
- risk assessment;
- communications and marketing;
- personnel and program management;

- organisational behaviour;
- public policy development and implementation;
- planning knowledge (in areas such as land use, energy production, resource utilisation, transportation, product design and development);
- cultural sensitivity;
- strategic planning;
- financial planning and management;
- environmental law.

Interdisciplinary focus

Apart from these competencies, environmental practitioners will also be required to be interdisciplinary in their focus. Sustainability requires the involvement of a score of disciplines. Additionally, sustainability requires environmental practitioners to function in roles varying from routine inspection and surveillance through to management, policy, education and research.

These practicalities will require environmental practitioners to develop alliances with other professionals practising in the field of sustainability including, but not limited to physical scientists, life scientists, social scientists, educators, physicians, environmental scientists, engineers, data specialists, planners, administrators, laboratory scientists, veterinarians, economists, political scientists and yes even lawyers.

Leadership

The development of alliances with other professionals who practise in the sustainability field however should not detract from environmental practitioners being leaders in the field of sustainability. Whilst other professionals such as myself may practise in the sustainability field, environmental practitioners should be the leaders in the sustainability field.

Environmental practitioners must show effective leadership as scientists, managers, policy formulators and risk communicators. As leaders, environmental practitioners should:

- be strategic planners addressing current and emerging issues;
- lead rather than resist desirable changes in organisations, priorities and programs;
- be visionary, proactive and become agents of change;
- show the courage to direct public and political attention to science based priorities rather than emotionally perceived priorities;
- develop and implement public policy;
- understand and communicate the net sustainability impact of proposed programs; and
- ensure that alleged problems are properly defined prior to proposing expensive solutions and programs.

Conclusions

For those environmental practitioners who exhibit the necessary competencies and provide leadership in the sustainability field, the future is very bright indeed.

However, those who are inflexible and rely on past accomplishments, the status quo and the protection of organisational turf will become endangered species who are eking out a subsistence living in a constantly shrinking organisational environment.

By meeting the challenges of the next century, it is within the grasp of environmental practitioners to guarantee a bright future for themselves and more importantly for the sustainability agenda.

May the force be with you!

References

Anon (1999), *Creating the Present*, The Environmental Forum, November/December, pp 42.

Australian Institute of Environmental Health (NSW) (1993), *Environmental Management: A Guide for Local Government in NSW*, Australian Institute of Environmental Health, Sydney

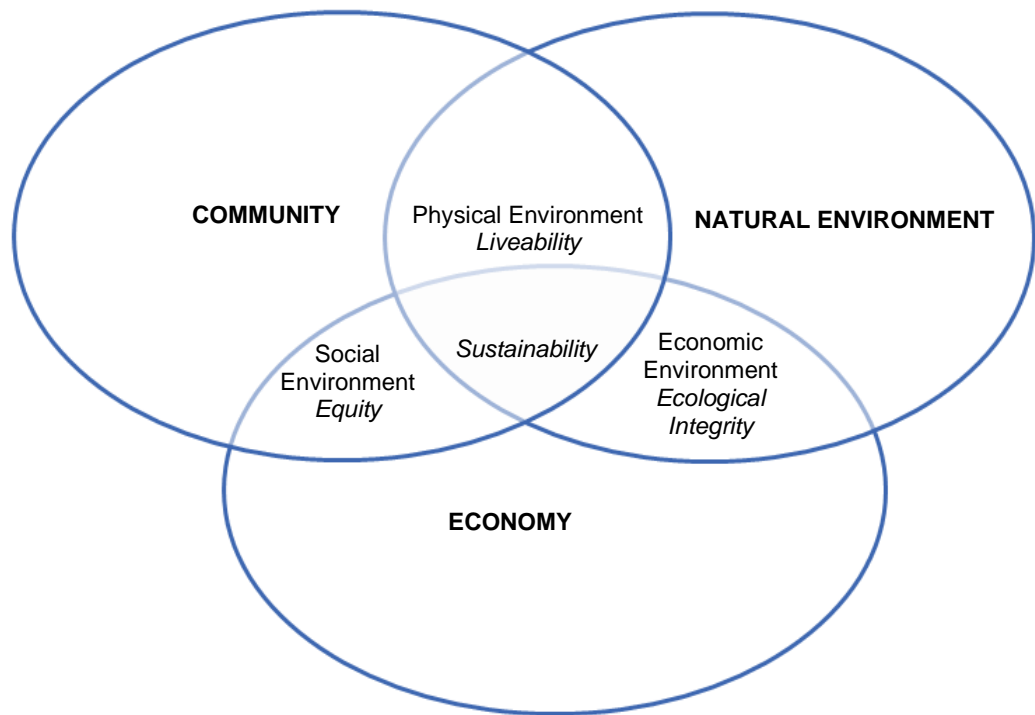
Australian Local Government Association (1992), *Making the Connections: Towards Integrated Local Area Planning*, Australian Local Government Association, Canberra

Australian Local Government Association (1993), *A Guide to Integrated Local Area Planning*, Australian Local Government Association, Canberra

- Australian Local Government Association (1993), *Ideas for Integrated Local Area Planning*, Australian Local Government Association, Canberra.
- Australian National University (1990), *Moving Towards Global Sustainability: Policies and Implications for Australia*, Australian National University, Canberra
- Brown V A, On L and Smith, D I (1992), *Acting Locally: Meeting the Environmental Information Needs of Local Government*, Department of the Arts, Sport, the Environment and Territories, Canberra.
- Brown, V R (1994), *Acting Globally: Supporting the Changing Role of Local Government in Integrated Environmental Management*, Department of the Environment, Sport and Territories, Canberra.
- Brunton, N (1999) Environmental Regulation: The Challenge Ahead, *Alternative Law Journal*, 24:3, pp 137.
- Commonwealth Environment Protection Agency (1992), *Development of a National State of the Environment Reporting System*, Discussion Paper, CEPA, Canberra. Commonwealth of Australia (1992), National Strategy for Ecologically Sustainable Development, AGPS, December, Canberra.
- Commonwealth of Australia (1994), *State of the Environment Reporting: Framework for Australia*, Department of Environment, Sport and Territories, Canberra.
- Conway, J B (1991), *On the Need to Teach Science to Environmental Health Students*, *Journal of Environmental Health*, November/December, pp29.
- Ecologically Sustainable Development Steering Committee (1993), *Summary Report on the Implementation of the National Strategy for Ecologically Sustainable Development*, Prime Minister & Cabinet, Canberra.
- Environmental Engineering Committee, Science Advisory Board, United States Environmental Protection Agency (1995) *An SAB Report: Future Issues in Environmental Engineering*, Science Advisory Board, United States Environmental Protection Agency, Washington.
- Fiorino, D (1999) *Rethinking Environmental Regulation: Perspectives on Law and Governance*, *Harvard Environmental Law Review*, 23, pp 441.
- Goonetilleke, A (ed) (1998) *Environmental Solutions for the Real World: Proceedings of the 2nd Queensland Environmental Conference, jointly organised by The Institution of Engineers, Australia, Queensland Division and the Queensland Chamber of Commerce and Industry, 28-29 May 1998 Sheraton Hotel, Brisbane Australia*, The Institution of Engineers, Australia, Queensland Division and the Queensland Chamber of Commerce and Industry, Brisbane.
- Gordon, L (1993), "The Future of Environmental Health and the Need for Public Health Leadership", *Journal of Environmental Health*, 56:5, pp38.
- Gordon, L (1993), *The Future of Environmental Health*, *Journal of Environmental Health*, 55:4 pp 28 and 55:5, pp 42.
- Gordon, L (1995), *Environmental Health and Protection: Century 21 Challenges*, *Journal of Environmental Health*, 57:6, pp28.
- Greene, Deni (1997) *Towards Sustainable Engineering Practice: Engineering Frameworks for Sustainability*, The Institution of Engineers, Barton.
- Gunningham, N and Sinclair, D (1998) *New Generation Environmental Policy: Environmental Management Systems and Regulatory Reform*, *Environmental Management Systems and Regulatory Reform*, 22, pp 592.
- Gunningham, N, Grabosky, P and Sinclair, D (1998) *Smart Regulation: Designing Environmental Policy*, Clarendon Press, Oxford.
- Hocking, G (ed) (1992) *Short Course on Environmental Regulations, Compliance and Liability Presented at the University of New South Wales, February 6-7, 1992* (collection of papers), University of New South Wales, Butterfly Books, Springwood.
- Iverson, D C and Cornell, Z J (1994) *A Definition of Sustainability for Ecosystems Management*, EcoWatch Forum.
- Keohane, N, Revesz, R L and Stavins, R N (1998) *The Choice of Regulatory Instruments in Environmental Policy*, *Harvard Environmental Law Review*, 22, pp 313.
- Kotchian, S B (1993), *Environmental Issues for the 1990's: Guidelines for the Private Sector*, *Journal of Environmental Health*, 56:4, pp40.
- Leadbeter, P, Gunningham, N, Boer, B (eds) (1999) *Environmental Outlook No. 3: Law and Policy*, Federation Press, Sydney.
- Local Government Ministers' National Working Group (1992), *The Role of Local Government in Environmental Management*, University of Tasmania, Hobart
- Michelic, J R (ed) (1999) *Fundamentals of Environmental Engineering*, John Wiley & Sons Inc, New York.

- National Capital Authority (1996), *Towards Best Practice Planning for Improved Urban Management*, Australian Government Publishing Service, Canberra.
- National Local Government Environmental Resource Network, CRES and DHRD (1994), *A Toolkit of Strategies, An Integrated Environmental Management Manual*, Department Housing and Regional Development, Canberra.
- Neuman, P (1999), *Sustainability and Australian Cities*, Australian Planner, 36:2, pp93-100.
- OECD (1978), *Urban Environmental Indicators*, OECD Publications Centre, Washington.
- OECD (1993), *OECD Core Set of Indicators for Environmental Performance Reviews*, Environment Monographs 83, Synthesis report by the Group on the State of the Environment (mimeo), OECD, Paris.
- Pompili, M R S (1995), *Environmental Mandates: The Impact on Local Government*, 57:5, pp6.
- Schilling, J (1999) *Special Forces*, The Environmental Forum, November/December, pp 30.
- Steinzor, R (1998) *Reinventing Environmental Regulation: The Dangerous Journey from Command to Self-Control*, Harvard Environmental Law Review, 22, 103.
- The Institution of Engineers, Australia (1995) *Towards a Sustainable Future: Challenges and Responses, National Environmental Engineering Conference 1995, Melbourne, Victoria, 15-17 March 1995* (preprints of papers), The Institution of Engineers, Barton.
- The Institution of Engineers, Australia (1996) *The Darwin Summit: Engineering Tomorrow Today, 1996 National Engineering Conference, Darwin, Northern Territory, 21-24 April 1996* (preprints of papers), The Institution of Engineers, Barton.
- Thorman, R (1995), *Suggested Framework for Preparing Regional Environmental Strategies: Draft Guidelines*, Australian Local Government Association, Canberra.
- Wright, I L (1999) *Drafting IPA Planning Schemes: The Challenges Facing Land Use Planners*. Paper presented to the Queensland Environmental Law Association Conference, May 1999.
- Wright, I L (1999) *Roles and Opportunities for the Environmental Health Practitioner in the Next Century*. Paper presented to the Australian Institute of Environmental Health (Queensland Branch) Conference, September 1999.
- Wright, I L and Hewitt, N (1999) *Putting the Horse Before the Cart: Integrating Environmental Health Practice into Sustainable Development*. Paper presented to Australian Institute of Environmental Health Conference, November 1999.

Figure 1 The sustainability framework



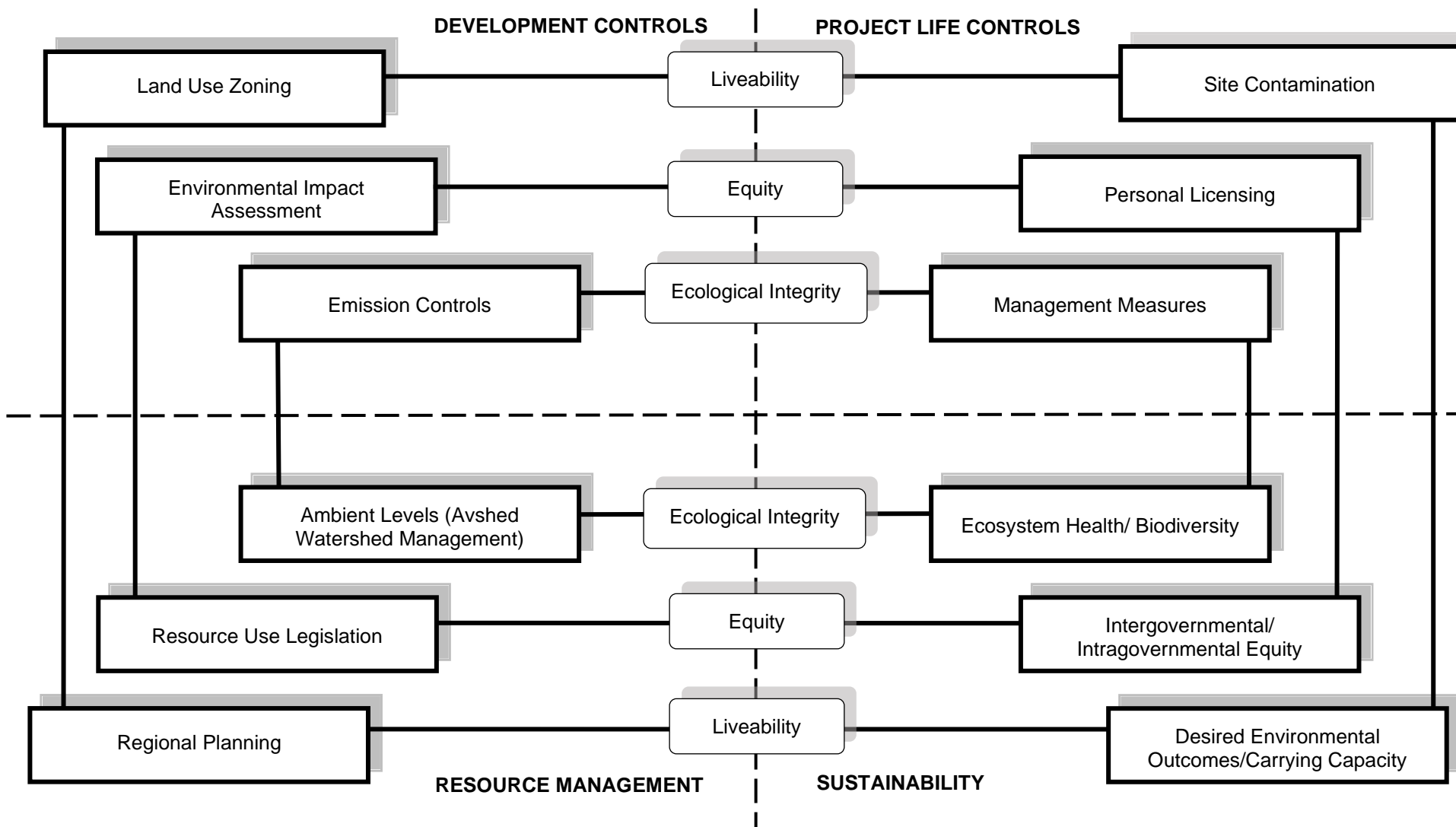


Figure 2 Environmental regulation model

Table 1 Phases of environmental regulation

Sustainability Objectives	Phases of Environmental Regulation			
	Phase 1: Development Controls	Phase 2: Project Life Controls	Phase 3: Resource Management	Phase 4: Sustainability
Ecological Integrity	Environmental impact assessment: <ul style="list-style-type: none"> • <i>State Development and Public Works Organisation Act 1971</i> 	Personal licensing of project operators: <ul style="list-style-type: none"> • <i>Environmental Protection Act 1994</i> 	Resource use legislation: <ul style="list-style-type: none"> • <i>Vegetation Management Act 1999</i> • <i>Coastal Protection and Management Act 1995</i> • <i>Nature Conservation Act 1992</i> • <i>Land Act 1994</i> • <i>Water (Allocation and Management) Bill 1999</i> 	Ecological integrity: <ul style="list-style-type: none"> • Ecosystem health • Biological diversity
Equity	Pollution controls: <ul style="list-style-type: none"> • <i>Clean Air Act 1963</i> • <i>Litter Act 1971</i> • <i>Clean Waters Act 1978</i> • <i>Noise Abatement Act 1978</i> 	Management Mechanisms (Audits, EMPs, EMS): <ul style="list-style-type: none"> • <i>Environmental Protection Act 1994</i> 	Management of airsheds and watersheds and specification of ambient contaminant levels: <ul style="list-style-type: none"> • <i>Environmental Protection Act 1994</i> • Resource Management Legislation (as listed above) 	Inter-generational equity: <ul style="list-style-type: none"> • Irreversibility • Precautionary principle • Preventative Action Intra-generational equity: <ul style="list-style-type: none"> • Environmental justice • Global responsibility Accountability: <ul style="list-style-type: none"> • Community participation • Stewardship
Liveability	Land use planning: <ul style="list-style-type: none"> • <i>Local Government Act 1936</i> • <i>Local Government (Planning and Environment) Act 1990</i> • <i>City of Brisbane (Town Plan) Act 1959</i> • <i>City of Brisbane Town Planning Act 1964</i> 	Site contamination legislation: <ul style="list-style-type: none"> • <i>Contaminated Land Act 1991</i> • <i>Environmental Protection Act 1994</i> 	Regional planning: <ul style="list-style-type: none"> • <i>Integrated Planning Act 1997</i> 	Liveability: <ul style="list-style-type: none"> • Desired environmental outcomes • Carry capacity measures (Performance indicators)
Time Period	1960s - 1980s	1980 - 1995	1995 - 2000	2000 - 2010

This paper was presented at the 3rd Queensland Environmental conference, May 2000.

Review of the most recent developments in planning and environment law including changes to registrable environment covenants and road transport reform

Ian Wright

This article discusses the recent changes and updates to planning and environment law in Australia. It particularly focuses upon registrable environment covenants, liability for substandard work, road transport reform, changes to GST for government charges and the amendment to the *Environmental Protection Regulation 1998*

June 2000

Registrable environmental covenants

On 8 March 2000 the *Natural Resources and Other Legislation Amendment Act 2000 (NROLA)* came into force, amending a range of legislation relating to natural resources. In particular, the *Land Act 1994* and the *Land Title Act 1994* have been amended to expand the type of covenants capable of registration against land titles.

Binding successors in title

The use of covenants to regulate the use of land is not new. "*Brick and tile*" covenants are widely used in the development industry to bind purchasers to minimum development standards in housing estates. However, a common problem encountered with this form of regulation is that developers' covenants are contractual and do not bind successors in title. Thus, as time goes on, the ability to require compliance with these covenants is often lost through change of ownership. However, a registered covenant under the Land Act (for leasehold land) or the Land Title Act (for freehold land), operates as a burden on the title which runs with the land, binding the owner and successors in title. Prior to the amendments made by the NROLA, the only form of registrable covenant allowed under Queensland law was one which required that the covenanted property only be sold together with another specified property. The use of this type of covenant was generally limited to odd shaped lots created by partial resumptions.

Environmental covenants

Under the NROLA amendments, covenants which relate to the use of land or buildings or to the conservation of natural or physical features of a property may be registered against land titles. The amendments do not intend to provide for registration of "*brick and tile*" covenants or other "*architectural and landscaping*" covenants. They do, however, contemplate a wide range of registrable environmental covenants, including:

- covenants to protect and maintain screening vegetation on private property adjacent to major roads;
- covenants entrenching building envelopes and buffer areas on lots;
- covenants giving effect to voluntary conservation agreements, including those entered into under the *Nature Conservation Act 1992*; and
- covenants restricting the allowable uses of environmentally sensitive land.

It is important to note that covenants are intended to reflect voluntary agreements for the benefit of the State government or a local government and may only be removed with the agreement of the entity benefiting from the covenant or by court order. In this sense, the registration of a covenant will give significant control to the relevant government entity and will be a significant limitation upon the owner's title.

Relationship with Integrated Planning Act

The NROLA makes minor amendments to the *Integrated Planning Act 1997* to specifically preclude covenants registered under the Land Act and the Land Title Act being inconsistent with planning schemes or development approvals under the Integrated Planning Act. Further, if a covenant is to be entered into in connection with development the relevant development approval must require such a covenant. In this sense, the amendments make it clear that covenants are not intended to be used to create rights outside of the IDAS process established in the Integrated Planning Act.

Conclusions

The new provisions present significant opportunities for landholders and local governments, many of whom are already involved in "off-park" conservation programs. Local governments will be able to secure existing conservation arrangements and encourage further expansion of private conservation measures for land with high conservation value, such as land containing habitat of endemic species and land buffering publicly owned land. Land owners who wish to protect their land and are willing to accept limitations upon their right to manage their land may now have voluntary arrangements registered as an environmental covenant, which will continue to run with the land.

Liability for substandard development works

Two recent events relating to liability for substandard work highlight the difficulties faced by local governments in monitoring the quality of development work occurring within the local government area.

Enforcing conditions against developers' consultants

The first development was the decision in the recent case of *Ipswich City Council v Cuthbertson & Ors*, Planning and Environment Application No. 2897 of 1998, where the Ipswich City Council tried to pursue not only the developer of a subdivision (Cuthbertson), but also the firm of engineers retained by the developer and the employed engineer who worked on the project, where work did not comply with the conditions of approval. The council alleged that the engineer, as well as the developer, was a person who had "failed to comply" with conditions of a development approval for the purposes of seeking enforcement orders.

The condition which was not complied with related to the depth of base and sub-base in three rural residential roads constructed in a sub-division. The engineer who performed site inspections and attended at the box and pre-seal inspections with council representatives, certified the works as complying with council conditions. It was not until the roads began to fail a short time later that testing revealed that the depth of the base and sub-base layers was less than required by council conditions. Much expert evidence was placed before the court as to the scope of the engineer's retainer and the performance of the engineer's duties. Expert evidence as to the appropriateness of the testing mechanisms utilised by the engineer was led and alternative explanations for the discrepancy between the box and pre-seal inspection results and the post-failure results were hypothesised.

In giving his reasons for judgment, Judge Skoien said:

"I take to be the universally accepted proposition that the owner of the land being subdivided is the person primarily struck with the responsibility to carry out the subdivision in accordance with the approval and the conditions which have been applied to it". (pp10-11)

"I cannot accept that the engineers were bound ... to construct the roads. They merely undertook contractually to assist (the owner) to do that ... the condition actually only binds (the owner)." (p13)

The evidence showed non-compliance with the conditions and orders were obtained against the developer in this case. However, the possibility that local governments may have been able to pursue other parties for failure to comply with conditions of approval, where developers are insolvent, appears to have been stopped in its tracks by this decision.

Collapsed Deck

The second event was the collapse of a deck in suburban Brisbane in early February 2000. This incident has focussed attention upon the role and responsibility of local governments with respect to building approvals.

It is clear that local governments are exposed to potential liability where work has been approved by the local government. However, with private certification of development becoming more common, local governments are faced with a situation where building works are being approved and constructed within the local government area with little or no control exercised by local government. Given that the *Integrated Planning Act 1997* requires private certifiers to provide the local government with copies of all development approvals, the extent to which local governments may be exposed to liability for damage arising out of privately certified building work within the local government area is a matter that requires consideration.

Road transport reform legislation

On 1 December 1999 legislative amendments repealing the *Traffic Act 1949* and introducing the new Queensland Road Rules came into force. Local governments should consider the effect of these amendments on their local laws and subordinate local laws.

Transport Operations (Road Use Management – Road Rules) Regulation 1999

The new Queensland Road Rules have been introduced to replace those under the Traffic Act and provide road rules in Queensland which are consistent with the rest of Australia.

Road Transport Reform Act 1999

The effect of the *Road Transport Reform Act 1999* is to relocate many provisions of the Traffic Act to the *Transport Operations (Road Use Management) Act 1995* and repeal the balance of the Traffic Act (excluding sections 30 and 62 which are to be repealed later this year).

Despite the repeal of the Traffic Act, the power of local governments to adopt local laws regulating traffic and other activities on roads will continue in force under the *Transport Operations (Road Use Management) Act 1995*. However, for local governments, there are a number of relevant changes including:

- the amendment of defined terms;
- the powers to issue parking infringement notices and prescribe infringement notice penalties are now found in the *Justices Act 1886* and the *Transport Operations (Road Use Management) Act 1995*;
- the powers of local governments to make local laws relating to traffic and roads now specifically include powers for the regulation of lights, notice and signs on or near roads, the amplification or reproduction of sounds on or near roads and the driving of vehicles and animals on foreshores.

Road Transport Reform Regulation 1999

This Regulation complements the Road Transport Reform Act by amending all regulations affected by the repeal of the Traffic Act. In addition to this, the offences contained in Part 12 (Restrictions on stopping and parking of vehicles) in the new Queensland Road Rules are specified to be minor traffic offences under the Transport Operations (Road Use Management) Act and, together with offences against local laws, are prescribed to be infringement notice offences for the Justices Act.

Traffic and Other Legislation Amendment Regulation (No. 1) 1999

This Regulation amends the *Transport Operations (Road Use Management) Regulation 1995*, the *Justices Regulation 1993* and the *Traffic Regulation 1962*. New penalties for infringement notice offences under the Traffic Regulation are also specified. However, the majority of the provisions in the Traffic Regulation are repealed as these provisions are now addressed in the new Queensland Road Rules. The remainder of the Traffic Regulation remains in force under the Transport Operations (Road Use Management) Act.

Transport Operations (Road Use Management – Vehicle Standards and Safety) Regulation 1999

This Regulation repeals the *Transport Operations (Road Use Management – Motor Vehicles Safety) Transitional Regulation 1994*, introducing new standards and safety requirements for vehicles. This regulation commenced on 1 October 1999.

Transport Operations (Road Use Management – Vehicle Registration) Regulation 1999

This Regulation replaces requirements and procedures for vehicle registration previously found in the *Transport Infrastructure (Roads) Regulation 1991*. This Regulation commenced on 1 October 1999.

Impact on local government

The amendments in the above legislation will impact on local government's local laws and subordinate local laws and the enforcement of parking and other road use offences. Local governments should review their existing and proposed local laws and subordinate local laws to identify any anomalies where they call up definitions or refer to sections in the Traffic Act. If anomalies are found, local governments should amend the relevant local laws and subordinate local laws to refer to the appropriate legislation.

Determination of GST applying to government charges

The Federal Treasurer recently released the determination relating to the application of the GST to government charges. The underlying rationale for the determination is that the GST should not apply to compulsory taxes and charges, but should apply to fees for services provided by government. A copy of the determination is available on the treasury website at <http://www.treasury.gov.au>. Fees for the issue and renewal of licences, rates, and water access charges and development application fees are proposed to be GST free. However, fees for local government inspections, use of local government facilities and cemetery, burial and cremation fees are proposed to be subject to the GST. The application of GST to local government charges will obviously be of significant community interest and will also impact upon local government administration.

Amendment to the Environmental Nuisance Regulation

On 26 November 1999 the *Environmental Protection Regulation 1998 (EPR)* was amended, introducing a new Part 2A which provides for:

- unlawful environmental nuisance to be enforced by the issuing of nuisance abatement notices;
- specific noise offences to be enforced by issuing infringement notices.

Unlawful environmental nuisance

Part 2A introduces the new concept of "*unlawful environmental nuisance*" which is environmental nuisance not authorised under an environmental protection policy, environmental management program, environmental protection order, environmental authority, development condition of a development permit or emergency direction. The definition of "*unlawful environmental nuisance*" includes certain exceptions such as cooking odour from residential premises. As with the existing offence of causing unlawful environmental harm, compliance with the general environmental duty prescribed by section 36 of the Act is also a defence to the new offence of causing unlawful environmental nuisance.

Enforcing environmental nuisance offences

Responsibility for the enforcement of offences under part 2A of the EPA is devolved to the local government for the area where the relevant land is situated. The local government is required to investigate complaints of alleged unlawful environmental nuisance, unless the complaint is frivolous, vexatious, based on a mistaken belief or more appropriately dealt with under another law such as the *Liquor Act 1992*.

Nuisance abatement notices

Where an investigation shows that unlawful environmental nuisance has occurred, a nuisance abatement notice may be issued by the local government. The recipient of such a notice must comply with the maximum penalties for failure to comply being 40 penalty units for individual and 80 penalty units for a corporation. Failure to comply with a nuisance abatement notice may be enforced by way of an infringement notice.

Specific noise offences

Division 4 of Part 2A of the EPA creates a number of specific noise offences relating to a range of matters which are often the source of community complaints, such as swimming pool equipment, air-conditioning equipment, gardening equipment and power boat engines. There are exemptions to these offences, such that activities under a range of approvals will not contravene these new provisions. The new regulations provide local government with significant additional powers for the control of activities which are often the source of complaints within the community.

This paper was published as a Planning Law Update in the Queensland Planner 40:2, June 2000.

Environmental News – Queensland – Vegetation Management Act 1999

Samantha Johnson | Ian Wright

This article discusses the operation of the *Vegetation Management Act 1999*

November 2000

The *Vegetation Management Act 1999 (VMA)* commenced operation on 15 September 2000. Its objects include the preservation of native vegetation and ecosystems on freehold land while still allowing for ecologically sustainable use. Its objects are to be met through an integrated approach with the *Integrated Planning Act 1997* by the development of applicable codes for the assessment of IDAS applications that involve the clearing of land. The VMA requires the State to develop a vegetation management policy as well as regional vegetation management plans. Areas may be declared to be of high nature conservation value or declared to be areas vulnerable to land degradation. In conjunction with the regional plans, "*regional ecosystem maps*" may be prepared to display remnant endangered regional ecosystems, remnant "*of concern*" regional ecosystems, remnant "*not of concern*" regional ecosystems, declared areas of high nature conservation value and declared areas vulnerable to land degradation. The *Vegetation Management Regulation 2000* specifies regional remnant ecosystems that are "*endangered*", "*of concern*" or "*not of concern*" with reference to recognised Environmental Protection Agency reports.

The VMA provides that a compliance notice may be given to a person believed to have committed, or to be committing, a vegetation clearing offence. This means that if conduct constitutes a "*development offence*" for the purposes of IPA and the conduct relates to the clearing of vegetation on freehold land, a notice can be issued requiring that the conduct be ceased and that the matter be rectified. Strict penalties are provided for non-compliance with the enforcement notice. There is provision for appeals against the issue of a compliance notice as well as proceedings for offences against the VMA or for vegetation clearing offences.

The *Vegetation Management Amendment Act 2000 (amending Act)* was assented to on 13 September 2000. The amending Act provides procedural amendments and addresses difficulties arising from the delay in proclamation of the VMA, such as providing an extension to the dates contained in the transitional provisions. The amending Act removes from the "*purpose*" of the Act the requirement to preserve "*of concern*" regional ecosystems. This was due to the lack of available Commonwealth funding. Amendments to the provisions of the VMA that amend the *Integrated Planning Act 1997* and the *Land Act 1994* are provided by the amending Act to ensure integration of the vegetation management provisions across each Act.

This paper was published in the Environmental Engineering Society (Qld Chapter) News 1:1, November 2000.

Environmental News – Queensland – Environmental Protection and Other Legislation Amendment Bill 2000

Samantha Johnson | Ian Wright

This article discusses the effect of the *Environmental Protection and Other Legislation Amendment Bill 2000*, particularly its impact on environmental regulation of the mining industry

November 2000

The focus of the *Environmental Protection and Other Legislation Amendment Bill 2000* (the **Bill**) is to transfer environmental regulation of the mining industry from the Department of Mines and Energy to the Environmental Protection Agency. The Bill amends the *Environmental Protection Act 1994* (**EPA**) quite significantly to achieve this objective.

The Bill inserts a new subdivision into the EPA dealing with Environmentally Relevant Activities (**ERA**). The amendments include the addition of "*mining activities*" into the definition of an ERA. The Bill provides for mining to be either a Level 1 or a Level 2 ERA, depending upon the environmental risk of the particular project being assessed.

The Bill inserts 4 new Chapters into the EPA. Chapter 2A – Environmental Impact Statements (**EIS**), sets out when an EIS is required, the submission of draft Terms of Reference by the proponent and their public notification requirements, the preparation and submission of the EIS, the public notification requirements of the EIS and the preparation by the Chief Executive of an EIS Assessment Report. There is also scope for the voluntary preparation of an EIS. The Environmental Protection Agency will therefore have the power to require a significant mining project to prepare an EIS. The existing EIS process under the *Mineral Resources Act 1989* (**MRA**) will be removed.

Chapter 2B – Development Approvals and Environmental Authorities other than for Mining Activities replaces the existing Chapter 3 parts 4 – 4C. The Bill provides for five different types of environmental authority ranging from a licence for a level 1 ERA through to an approval for a level 2 ERA. An application for assessable development under the *Integrated Planning Act 1997* (**IPA**) for carrying out an ERA must be assessed as an application for an environmental authority in accordance with certain criteria. A licence can be obtained without a development approval upon compliance with certain requirements. Licences can be converted into Level 1 ERA approvals. The administering authority can amend, cancel or suspend environmental authorities upon the giving of specified notice to the environmental authority holder.

Chapter 2C – Environmental Authorities for Mining Activities is new to the EPA and incorporates many existing provisions of the MRA. A mining tenement under the MRA will be provided to an applicant simultaneously with an environmental authority, similarly, public notification of applications for mining claims or leases under the MRA will occur with that of the draft environmental authority under the EPA. The environmental impacts of mining projects will be assessed by classifying the proposed activities as either level 2 (standard) or level 1 (non-standard). Codes of Environmental Compliance establish standard conditions to attach certain Level 2 environmental authorities. Non-standard activities will be assessed and conditioned by the EPA on a case by case basis, however, an environmental management plan will be required. If an EIS is required under the EPA for the proposed activity, the EIS process must be complied with before the assessment and decision of the environmental authority. The environmental authority and the conditions must be clear, enforceable and protect all aspects of the environment. The Environmental Protection Agency remains responsible for all environmental compliance aspects of mining and has power to arrange independent environmental audits of mining activities.

The Bill provides for extensive amendments to the MRA so as to remove existing provisions that now take effect under the EPA and provides existing mining projects with a transitional environmental authority. Of particular note are the amendments to the MRA regarding variations to Environmental Management Overview Strategies and the provision for landholders to lodge a new compensation agreement for loss of use of their land when mining operations change and new, previously unforeseen, impacts result.

New offences relating to ERAs, Environmental Requirements and Development Approvals and Environmental Harm have been inserted into the EPA, while existing offences remain.

Objections and appeals will be heard by the Land and Resources Tribunal, an independent and impartial forum that will encourage mediation and agreement between the parties. If a dispute cannot be solved via mediation, recommendations will be made to the Minister for Mines and Energy who will consult with the Minister for Environment and if necessary, Cabinet.

This paper was published in the Environmental Engineering Society (Qld Chapter) News 1:1, November 2000.

Environmental News – Interstate and National – Environment Protection and Biodiversity Conservation Act 1999

Samantha Johnson | Ian Wright

This article discusses the recent changes to planning and environment law in Australia. It particularly focuses upon Queensland State Planning Policy 1/100, controlled actions per the *Environment Protection and Biodiversity Conservation Act 1999* and the introduction of the *Environment Protection and Other Legislation Amendment Bill 2000*

November 2000

State planning policy

On 14 August 2000 the Minister for Communication and Information, Local Government, Planning and Sport adopted State Planning Policy 1/00 "*Planning and Management of Coastal Development Involving Acid Sulphate Soils*" (**SPP 1/00**). SPP 1/00 will commence on 20 November 2000 and cease to have effect on 18 November 2001. Notification appeared in the Government Gazette on 25 August 2000.

Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)

The *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**) came into force on 16 July 2000 and provides for major reforms of environmental laws at the Commonwealth level. The objects of the EPBC Act include provision for the protection of the environment, promotion of ecologically sustainable development and conservation, engendering a co-operative approach to environmental management across sectoral groups and assisting in the implementation of Australia's international environmental responsibilities.

The Act specifies that an approval from the Federal Environment Minister will be required to undertake categories of actions defined as "*controlled actions*". Generally, controlled actions affect matters of "*national environmental significance*". The Act establishes environmental assessment processes for various "*controlled actions*". "*Actions*" include a project, development, undertaking, activity or an alteration of any of these. However there are qualifications to this definition. The wide definition of "*controlled actions*" includes actions that have, or are likely to have, a significant impact on a world heritage property, a declared Ramsar wetland, listed threatened species, ecological communities or migratory species, the environment as a result of a nuclear action, Commonwealth marine areas or Commonwealth land. Additional matters of national environmental significance may be prescribed under regulation. The Commonwealth government is currently considering a regulation including a greenhouse emissions trigger. The Act does contain exceptions to the general principle that an approval from the Minister is required to undertake a controlled action. A proposed action may also be referred to the Minister for a determination as to whether it is a "*controlled action*".

Once it is determined that an action is a "*controlled action*", the Minister must choose a method of assessing the action (which may include an environmental impact report), to determine its impacts. Once the action is assessed, the Minister must refuse or approve the proposed action and may attach conditions to an approval. The decision must be made in accordance with Australia's international environmental obligations. Strict civil and criminal penalties apply for undertaking a "*controlled action*" without approval or for breaching the conditions of an approval.

Environment Protection and Other Legislation Amendment Bill 2000

The purpose of the *Environment Protection and Other Legislation Amendment Bill 2000* (Qld) (**Bill**) is to transfer environmental regulation of the mining industry from the Department of Mines and Energy to the Environmental Protection Agency. The Bill introduces substantial amendments to the *Environment Protection Act 1994* (**EP Act**) in order to achieve this objective.

The Bill inserts a new subdivision into the EP Act dealing with Environmentally Relevant Activities (**ERA**). The amendments include the addition of "*mining activities*" into the definition of an ERA. The Bill provides for mining to be either a Level 1 or a Level 2 ERA, depending upon the environmental risk of the particular project being assessed.

The Bill inserts four new chapters into the EP Act:

- Chapter 2A – Environmental Impact Statements (**EIS**), sets out when an EIS is required, the submission of draft Terms of Reference by the proponent and their public notification requirements, the preparation and submission of the EIS, the public notification requirements of the EIS and the preparation by the Chief Executive of an EIS Assessment Report. There is also scope for the voluntary preparation of an EIS. The Environment Protection Agency will therefore have the power to require a significant mining project to prepare an EIS. The existing EIS process under the *Mineral Resources Act 1989 (MRA)* will be repealed.
- Chapter 2B – Development Approvals and Environmental Authorities other than for Mining Activities will replace the existing Chapter 3 Parts 4 - 4C of the EP Act. The Bill provides for five different types of environmental authority ranging from a licence for a level 1 ERA through to an approval for a level 2 ERA. An application for assessable development under the *Integrated Planning Act 1997 (IPA)* for carrying out an ERA must be assessed as an application for an environmental authority in accordance with certain criteria. A licence may be obtained without a development approval upon compliance with certain requirements. Licences may be converted into Level 1 ERA approvals. The administering authority can amend, cancel or suspend environmental authorities upon the giving of specified notice to the environmental authority holder.
- Chapter 2C – Environmental Authorities for Mining Activities is a new addition to the EP Act and incorporates many existing provisions of the MRA. A mining tenement under the MRA will be provided to an applicant simultaneously with an environmental authority and the public notification of applications for mining claims or leases under the MRA will occur with that of the draft environmental authority under the EP Act. The environmental impacts of mining projects will be assessed by classifying the proposed activities as either level 2 (standard) or level 1 (non-standard). Codes of Environmental Compliance establish standard conditions to attach to certain level 2 environmental authorities. Non-standard activities will be assessed and conditioned by the EP Act on a case by case basis; however an environmental management plan will be required. If an EIS is required under the EP Act for the proposed activity, the EIS process must be complied with before the assessment and decision in relation to the environmental authority. The environmental authority and the conditions must be clear, enforceable and protect all aspects of the environment. The Environment Protection Agency remains responsible for all environmental compliance aspects of mining and has power to arrange independent environmental audits of mining activities.

The Bill provides for extensive amendments to the MRA so as to repeal existing provisions that will now take effect under the EP Act and provides existing mining projects with a transitional environmental authority. Of particular note are the amendments to the MRA regarding variations to Environmental Management Overview Strategies and the provision for landholders to lodge a new compensation agreement for loss of use of their land when mining operations change and new, previously unforeseen, impacts result.

New offences relating to ERAs, Environmental Requirements and Development Approvals and Environmental Harm have been inserted into the EP Act, while existing offences remain.

Objections and appeals will be heard by the Land and Resources Tribunal, an independent and impartial forum that will encourage mediation and agreement between the parties. If a dispute cannot be resolved via mediation, recommendations will be made to the Minister for Mines and Energy who will consult with the Minister for Environment and, if necessary, Cabinet.

This paper was published in the Environmental Engineering Society (Qld Chapter) News 1:1, November 2000.

Legislation and Policy – Planning and management of coastal development

Ian Wright | Samantha Johnson

This article discusses the Queensland government's State Planning Policy 1/00. It particularly considers the assertion for the need of early identification and management of acid sulphate soils to minimise adverse impacts to the natural and built environment conducted along coastlines

December 2000

The Queensland government's State Planning Policy 1/00 (the **Policy**) addresses the need for early identification and management of Acid Sulphate Soils (**ASS**) so as to minimise actual and potential adverse impacts to the natural and built environment from development activities conducted along the Queensland coastline. The policy commenced on 20 November 2000 and will cease to have effect on 18 November 2001.

The Policy places obligations on both local governments and developers with regard to the management of ASS. The Policy requires local governments when allocating land uses with ASS areas to follow a specific hierarchy to avoid excavation, dewatering or filling. Any disturbance to ASS land must be carefully planned and managed to avoid potential and adverse effects on the natural and built environments. Local governments must also investigate and identify the location, depth and severity of ASS within its local government area and define options regarding the scale and nature of future development in each area.

Broadly, for the Policy to apply, development must meet three criteria: be subject to impact assessment or the impact assessment process; the application must involve a listed aspect of development in which filling or excavation is necessary; and the development must occur below five metres Australian Height Datum (**AHD**) and involve excavation (more than 100m³ of material), dewatering or filling.

Under the IPA assessment managers must have regard to the relevant provisions of a State planning policy when assessing development applications under both transitional and IPA planning schemes. Similarly, when deciding an application under both a transitional and an IPA planning scheme, the assessment manager may legitimately refuse the application for non-compliance with a relevant State planning policy.

These obligations on assessment managers to consider State planning policies when assessing and deciding development applications, make it prudent for a developer to include where relevant, as part of a development application, a report that includes an assessment of the ASS impacts and specifies management techniques. The annexes to the Policy contain technical procedures for the investigation, identification, treatment and management of ASS. It is recommended that a developer engage a suitably qualified professional experienced in ASS assessment to provide the report. The report should contain sufficient information to allow the assessment manager to determine whether there would be any adverse effects on the natural and built environments and human health as a result of the release of ASS contaminants into the environment. The Policy envisages that an assessment manager can impose reasonable and relevant conditions upon the approval of a development application to ensure the impacts of ASS are appropriately managed.

This paper was published in the Environmental Engineering Society (Qld Chapter) News 1:2, December 2000.

Legislation and Policy – Land access and telecommunications – What you need to know

Ian Wright | Samantha Johnson

This article discusses the rights and obligations of telecommunications carriers when seeking access to land and buildings to install telecommunications facilities

December 2000

There is considerable telecommunications network construction activity being undertaken in Australian cities at the moment. Requests from carriers to install rooftop antennae and dishes as well as cabling and MDF rooms within buildings are now commonplace. It is therefore important for owners of land and buildings to understand the rights and obligations of telecommunications carriers in seeking access to land and buildings to install telecommunications facilities.

The *Telecommunications Act 1997* (Cth) (**Act**), the *Telecommunications Code of Practice 1997* (Cth) (**Code**) and the *Telecommunications Low-Impact Facilities Determination 1997* (**Determination**), establish the rights and obligations of telecommunications carriers in seeking access to land and buildings to install telecommunications facilities.

The Act authorises carriers to undertake certain activities without the approval of the relevant State or Territory, local government or owner of the land. These activities include accessing land to assess the land's suitability for a telecommunications facility, installing certain telecommunications facilities and maintaining a facility that has already been installed. Conditions are imposed by both the Act and the Code upon the exercise of these activities. A carrier must protect the safety of people, property and the environment, minimise detriment and inconvenience, act in accordance with good engineering practice, comply with industry standards, give specified notice to the owner of the land and respond to any objections of the owner of the land.

The Determination identifies "*low impact facilities*" according to the type of facility and the type of area in which it is installed. Carriers do not need to obtain a permit to install low impact facilities but do need to comply with the conditions in both the Code and the Act. Low impact facilities do not include overhead cabling or new mobile telecommunications towers but do include payphones, underground cabling and roadside cabinets.

A carrier must provide written notice to a land or building owner that it intends to install a facility within the building or upon the land. The owner has a right to object to the installation. The grounds for an objection are narrow and restricted to the use of the land, the location of the facility, the date of installation, the likely effect of the installation on the land or the carrier's proposal to minimise detriment and inconvenience. Carriers have an obligation to consult with the owner and try to resolve the objection by agreement. If agreement cannot be reached, the carrier must consider whether to change the proposed facility but has no obligation to do so if a change would not be economically feasible or technically practicable or if a change would have a greater adverse impact on the environment. If the landowner is not satisfied with the carrier's response, the objection may be referred to the Telecommunications Ombudsman.

A carrier is not obliged to pay rent to a building owner, nor can a building owner object to a proposed installation on the basis of a carrier's refusal to pay rent. A land owner is entitled to receive compensation if the land owner suffers financial loss or damage as a result of the carrier's activities. The meaning of compensation is uncertain, however, the preferred view is compensation for actual physical damage, such as the cost of repairing a hole in a wall.

This paper was published in the Environmental Engineering Society (Qld Chapter) News 1:2, December 2000.

Legislation and Policy – Product Stewardship (Oil) Act 2000 (Cth)

Ian Wright | Samantha Johnson

This article discusses the *Product Stewardship (Oil) Act 2000*. The article explains the Act's purpose and application within Australia

December 2000

The *Product Stewardship (Oil) Act 2000* is part of a package of four Acts to provide product stewardship for waste oil and to encourage economic recycling and reuse of waste oil.

Waste oil constitutes a significant environmental issue in Australia with approximately 95 — 100 million litres of oil being inappropriately used, stored or dumped. Many States and territories regulate waste oil in some manner, however, none provide any financial incentives to encourage recycling and reuse.

The "*Oil Stewardship Scheme*" comprises three main components:

- the imposition of a set levy on oil producers;
- the payment of a variable stewardship benefit to oil recyclers; and
- the trial of tradable certificates for recycled or reused oil.

The third component, the tradable certificates, is not included in the current package of Acts and will require further legislative action. There are no legislative moves at this stage to implement this component.

The *Customs Tariff Amendment (Product Stewardship for Waste Oil) Act 2000* and the *Excise Tariff Amendment (Product Stewardship for Waste Oil) Act 2000* establish the first component of the "*Oil Stewardship Scheme*". These Acts amend the *Customs Tariff Act 1995* and the *Excise Tariff Act 1921* to provide that all petroleum based products, whether produced in Australia or imported, are subject to a \$0.05 cents per litre/kilo duty. This duty essentially covers the anticipated costs of stewardship rebates. These Acts will not commence operation until 1 January 2000.

The *Product Stewardship (Oil) Act 2000* provides for the payment of product stewardship (oil) benefits to oil recyclers. A person is eligible to claim benefits for the sale or consumption of recycled oil that has been recycled in Australia. Prior to claiming any benefits, an oil recycler must register for product stewardship (oil) benefits under the *Product Grants and Benefits Administration Act 2000*. The amount of the benefit is to be determined in accordance with the *Product Stewardship (Oil) Regulation 2000* which may take into account the volume and quality of the recycled oil sold or consumed as well as the use of or intended use for the recycled oil. The Regulation establishes the amount of the product stewardship benefit as a cents per litre figure based upon various grades of recycled oil.

The *Product Stewardship (Oil) Act 2000* also provides for the establishment of an Oil Stewardship Advisory Council whose functions include providing advice to the Minister in relation to the operation of the Act, the state of the oil production and oil recycling industries and any other relevant matters.

The sections of the *Product Stewardship (Oil) Act 2000* that provide for the payment of the product stewardship (oil) benefits to oil recyclers will not commence operation until 1 January 2001.

This paper was published in the Environmental Engineering Society (Qld Chapter) News 1:2, December 2000.

Review of various planning legislation and policies

Ian Wright

This article discusses planning and environment law in Australia. It focuses on the Queensland Supreme Court decision concerning the North Queensland Conservation Council and pitfalls to footpath maintenance. It further considers Victorian planning and environment legislative amendments, along with a discussion on shaping the American City

December 2000

North Queensland Conservation Council Inc v Executive Director, Queensland Parks and Wildlife Service [2000] QSC 172 (QPWS)

The Supreme Court of Queensland has ordered that the North Queensland Conservation Council (NQCC) has standing to judicially review the decision of the QPWS to issue a permit allowing the State to develop a harbour and associated works within a marine park at Nelly Bay on Magnetic Island. The QPWS opposed the application brought by the NQCC on the basis that it did not have legal standing. The Supreme Court held that the NQCC had a special interest in relation to the proposal for a number of reasons, such as the fact that it had campaigned for many years to prevent the development and to have the area returned to its natural state. The Supreme Court also held that the test of standing should be satisfied if:

- the person's connection with the subject matter of the action is such that it would not constitute an abuse of process; and
- the person's involvement would not cause significant cost and inconvenience to the other party such as significant practical delay, impact on private legal rights or proprietary interests.

Pitfalls of footpath maintenance

Two recent Court of Appeal decisions highlight the risks with footpath maintenance for local government.

The *Local Government Act 1993 (LGA)* empowers local governments to construct and maintain roads, including footpaths, within their local area. For the purposes of negligence law, local governments are considered to be "highway authorities" with respect to the maintenance of roads and footpaths. In particular, highway authorities are generally only liable for negligent acts and not for failing to act with respect to road and footpath repairs.

Gold Coast City Council v Hall [2000] QCA 92

In this matter, the plaintiff fell and fractured her elbow when her foot became caught in a badly cracked footpath outside a bank. The footpath had been repaired some time previously and the cracks had developed where the patch overlaid the original path. The council denied that it had performed the repair work, leaving the plaintiff to prove that not only had the council performed the work, but they had also done so negligently. The repair work was found to be defective. No direct evidence was led showing that council employees or contractors had performed the work. However, the Court of Appeal upheld the trial judge's inference that, as the council had control and responsibility for the footpath, the most likely scenario was that the council performed the defective repair work. As such, the council was found to be liable.

Crombie v Livingstone Shire Council & Anor [2000] QCA 229

The plaintiff in this matter tripped on the broken edge of a concrete footpath when he turned to look back at a taxi pulling into a nearby rank. Evidence showed that the footpath had been laid 20 or 30 years before the incident and had been patched several times. The state of the footpath, with a crumbling kerbside and the absence of proper joints between the repair patches, was found to be the result of negligent work. The circumstances closely followed those in *Gold Coast City Council v Hall* [2000] QCA 92, with the council submitting that it had not carried out the repairs to the footpath and, as a highway authority, should not generally be liable. The court found that the failure of the council to call any other person who might have repaired the footpath, and the inherent unlikelihood that the repairs were carried out secretly by a third party, was a sound basis for drawing the conclusion that the council had carried out the repairs. Again, the council was held liable in negligence.

Conclusion

In these two cases, both local governments denied undertaking work, but failed to produce any evidence showing what other party performed the work. The cases indicate that the court will infer that the local government is responsible for footpath repair work, in the absence of evidence to the contrary.

As such, local governments should ensure that they keep records of the repair work they undertake, so that they can later demonstrate that the work was performed with due care. Further, if it comes to the local government's attention that repair work is performed by a third party, sufficient details should be recorded to demonstrate that the local government was not responsible for the work, so as to rebut the inference drawn by the court in *Hall* and *Crombie*.

It is also important to note that in *Hall* and *Crombie* the Court of Appeal did not consider the effect of the recent High Court cases *Pyrenees Shire Council v Day* [1998] 151 ALR 147 and *Ryan v Great Lakes* [1999] FCA 177, which have confirmed that local governments may generally be negligent if they know of a risk but do not take appropriate action to minimise or reduce that risk.

The decisions in *Hall* and *Crombie* suggest that the immunity from liability for non-feasance enjoyed by local governments as highway authorities may continue unaffected by these High Court decisions. However, the issue remains to be considered.

Brothels, adult entertainment and single operators

With the commencement of licensed brothels pursuant to the *Prostitution Act 1999*, it is important to understand the regulatory regime applying to the use of premises for sexually explicit activities. From 1 July 2000, local governments will now have to assess and regulate three distinct classifications of sexually explicit conduct, namely:

- the provision of prostitution in licensed brothels;
- adult entertainment under an adult entertainment permit, and
- the provision of prostitution by single operators.

Each of these activities has its own development assessment and regulatory requirements.

Prostitution in a licensed brothel

It is now lawful for two or more prostitutes to use premises for the provision of prostitution, provided that the premises are subject to and operated in compliance with:

- a brothel license pursuant to the *Prostitution Act 1999*, authorising the operator to operate at the stated premises, and
- a development permit for material change of use pursuant to the *Integrated Planning Act 1997*.

Development applications for a material change of use for the purposes of a brothel will be assessed by the local governments in whose area the proposed brothel will be situated. Applications must be refused if the proposal does not comply with mandatory requirements set out in the *Prostitution Act*, including that the premises:

- must not have:
 - more than five rooms used for the provision of prostitution;
 - more prostitutes on premises than the number of rooms permitted for the provision of prostitution;
 - more than ten staff on the premises at any one time; and
- must be located more than 200 metres from residential areas and other 'sensitive' land uses.

The type of assessment for applications will depend on the character of the locality of the premises. Where the premises are in an industrial area, the application will be assessed in line with the Brothel Code in schedule 3 of the *Prostitution Regulation 2000*. Where the premises are not in an industrial area, the application will be impact assessable. This determination is just one issue for local governments to grapple with.

Adult entertainment

In addition to licensing brothels, the *Prostitution Act* also amends the *Liquor Act 1992* to provide for the regulation of sexually explicit live entertainment. Where such explicit conduct might otherwise be seen as prostitution, it will be deemed not to be prostitution if it is conducted pursuant to an adult entertainment permit under the *Liquor Act*. The State government has prepared the *Liquor (Approval of Adult Entertainment Code) Regulation 2000* which defines the extent to which an adult entertainment permit may make explicit conduct lawful.

For local governments, the important management issue will be whether adult entertainment is within the scope of the approved uses for the premises. An adult entertainment permit may be sought in relation to any premises licensed under the *Liquor Act*. This could include premises approved as restaurants, sporting clubs and the like. The scope of relevant use definitions might require consideration if local governments seek to limit the types of premises where adult entertainment might be conducted.

Broad use definitions, allowing restaurants or clubs to include ancillary entertainment (or similar), might limit the ability of local governments to treat adult entertainment as a specific use of premises. To the extent that local governments might wish to regulate the types of premises where adult entertainment is offered, specific references may need to be incorporated into planning schemes.

Single operators

The *Prostitution Act 1999* has not affected the lawfulness of the provision of prostitution by a single prostitute in premises. For local governments, the current focus upon prostitution as a land use issue may give reason to consider the proper classification of residential premises used by sole operators for prostitution. It may be that a development approval for some form of home-based commercial use might be appropriate. However, as it appears that sole operators maintain a relatively low profile, moving premises quite frequently, it appears that local governments receive few complaints and even fewer applications for development approval.

Conclusion

The reforms contained in the *Prostitution Act* have been foreshadowed for some time. Local governments must now come to terms with the practicality of assessing and regulating the use of premises for a range of explicit conduct.

Water Act 2000

The Council of Australian Governments (**COAG**) 1994 Water Resources Policy requires all States to implement a comprehensive system of water resource allocation and management. The *Water Act 2000* is the result of extensive consultation and fulfils Queensland's responsibilities under the COAG water framework. Modules were released in March 2000 as exposure drafts of the Water (Allocation and Management) Bill; Water and Sewerage (Infrastructure and Services) Bill; and the Water (Statutory Authorities) Bill. These are now amalgamated into an overarching *Water Act 2000*, comprising over 380 pages.

Consolidation of legislation

The *Water Act* is the result of extensive consultation with key stakeholders and the community and is one of the most comprehensive consultation processes undertaken in Queensland to support the introduction of new legislation. Identified deficiencies of the former legislation include:

- a lack of power to explicitly consider ecological requirements for water;
- the potential of the incremental licensing system to threaten the security of existing entitlement holders;
- the tying of water interests to land which could restrict agricultural expansion (as new land must often be purchased to acquire more water);
- the tying of water allocations to licences to undertake works. Consistent with the implementation of the *Integrated Planning Act 1997* there is a need to separate the water allocation decision from the development approval to construct works;
- a lack of capacity for sharing of overland flow. This is a significant issue in some catchments as the harvesting of overland flow prior to entering watercourses affects the amount of water available to existing entitlement holders and to meet ecological needs;
- water resource allocations can be made under disparate pieces of legislation; and
- the Department of Natural Resources has varying and potentially conflicting roles as resource manager, infrastructure developer, and water service provider.

The Act replaces the *Water Resources Act 1989* and the *Gladstone Area Water Board Act 1984*, and relocates relevant urban water supply provisions from the *Sewerage and Water Supply Act 1949* (and Standard Laws) and *Metropolitan Water Supply and Sewerage Act 1909*, as well as consequential amendments including those to the *Petroleum Act 1923*, *Integrated Planning Act 1997*, *Local Government Act 1993* and *State Development and Public Works Organisation Act 1971*.

As a consequence of the modular development of the provisions of the *Water Act 2000*, an all-encompassing objects clause is absent. However, purpose clauses are included for component chapters and parts. The explanatory notes identify the Act as having three main objectives, which are the establishment of a:

- sustainable management framework for the planning allocation and use of water and other resources;
- regulatory framework for service providers covering asset management, customer standards and dam safety; and
- governance regime for statutory authorities that provide water services.

The former legislation establishing water supply statutory authorities is a mixture of both resource management and governance arrangements. The *Water Act 2000* seeks to separate governance issues from resource regulation by:

- bringing all statutory authorities that provide water under a single governance structure; and
- applying the resource allocation and regulatory arrangements in the Act to all service providers equally regardless of ownership.

Key components

Water resource regulation issues are addressed by Chapter 2 of the Act. It establishes a statutory water resource planning process to strategically assess the water needed to meet ecological requirements, and the water available for consumptive use for a ten year horizon. When tabling the Bill in Parliament, the Minister noted that local governments will play a key role in the plan development consultation processes, which are community driven and supported by the best available scientific information. An outcome of operational plans to be developed under the water resource planning process for each catchment is that existing water licences may be converted to '*water allocations*' that are decoupled from land interests, and are tradeable within the rules set by the water resource plan. A register recording water allocations and dealings for interests in water allocations is to be established.

Chapter 2 also promotes sustainable use of water in terms of the effects of water use on land and water resources by providing for water use plans that set standards for water use in a district, as well as land and water management plans for individual properties. Existing provisions in the former legislation dealing with catchment management, quarry materials and protection of watercourse integrity are relocated to Chapter 2 of the Act and will be the subject of subsequent review.

Chapter 3 of the Act establishes a registration system for all water service providers which requires providers to have in place strategic asset management plans and customer service standards, both being subject to self-reporting measures. Local governments owning infrastructure for supplying water or sewerage services fall within the meaning of 'provider' for the purposes of the Act, irrespective of whether a separate entity operates the infrastructure.

Governance arrangements for statutory authorities that provide water services (including rural water boards and the Gladstone Water Board) are dealt with by Chapter 4 of the Act. The intent of these provisions is to establish a governance and accountability framework that will apply consistent and appropriate accountability mechanisms and governance operations across existing and future water authorities. While the Act introduces changes affecting the operations of local governments, transitional provisions allow for the delayed commencement of many of these requirements so providers have time to comply with the new framework.

Shaping the American city

Planning Commissioner's Journal Spring Edition highlights the ten successes and ten failures that have shaped the twentieth century American city. The failures are identified as follows:

1. That demise of community orientated design and development.
2. The lost vision of regional planning.
3. The fragmented nature of metropolitan governance.
4. The unfulfilled promise of high tech housing.
5. The landscape of racial and economic segregation.
6. The disinvestment in public transport.
7. Defaulting on the promise of public housing.
8. The abandonment of requests for a great society.
9. Narrowing the mission of the USA's Department of Urban Affairs and Housing.
10. Comprehensive planning constrained.

The ten successes that shaped the twentieth century American city are identified as follows:

1. The provision of pure water and effective sewerage treatment.
2. The isolation of dangerous and disharmonious land uses.
3. The abolition of corrupt 'Boss' governments.
4. The development of integrated roadway systems.
5. The electrification of cities and regions.
6. The advent of universal communications.
7. The widespread extension of home ownership.
8. The realisation of metropolitan and regional park systems.
9. The control of land subdivision.
10. The environmental movement.

Planning and Environment (Restrictive Covenants) Bill 2000

The Victorian *Planning and Environment (Restrictive Covenants) Bill 2000* (**Bill**) proposes to amend the *Planning and Environment Act 1987* (**Act**) in relation to restrictive covenants. The Bill is intended to implement the principle that a permit to use or develop land must not be granted if the permit would result in the breach of a restrictive covenant. A permit may only be granted if authority to remove or vary the covenant is given either before or at the same time as the grant of the permit.

Restrictive covenants

Restrictive covenants are private restrictions on the way land may be used or developed and are registered on land titles. They bind the current owner and are usually created as a result of a legal agreement between a seller and a buyer of land. Restrictions might include a maximum number of dwellings permitted, requirements for a certain type of boundary fence or a maximum number of storeys for buildings. At present, even if the responsible authority knows that a covenant exists, it cannot take it into account in determining whether or not to grant a planning permit. The Bill seeks to ensure that any existing covenant is disclosed at the same time as a development application is submitted.

Options to remove or vary a covenant

The Second Reading Speech states that if the Bill is approved, there will be three options available for applicants to remove or vary a covenant:

- Obtain a court order under the *Property Law Act 1958* to remove or vary a covenant before applying for the permit.

This method currently exists but the Bill seeks to ensure that a permit can only be determined if the court order has been first obtained.

- Concurrently apply for a permit to remove or vary the covenant and a permit to use or develop the land.

This method also currently exists but creates an incentive for applicants to use it by prohibiting the grant of a permit that would result in a breach of the covenant.

- Ask a planning authority to prepare an amendment to a planning scheme to authorise removal or variation of the covenant and concurrently consider an application to use or development the land.

This method does not currently exist and the Bill provides for it. It puts local councils in a central position to decide whether the proposed application and amendment ought to proceed.

Councils to be aware of covenants

The Bill ensures that responsible authorities are aware of covenants before they make decisions on permits by:

- requiring the applicant to disclose a covenant at the outset;
- proper notice is given to owners of land benefiting from the covenant; and
- allowing benefited owners to make submissions and objections about the application to use or develop land or an application or amendment relating to the covenant removal. Those submissions can be amplified at any future panel hearing appointed.

Certain covenants not affected

The Bill does not affect special types of covenants including:

- statutory covenants under the *Heritage Act 1995* and the *Victorian Conservation Trust Act 1972*; and
- covenants affecting projects of declared State or regional significance under Part 9A of the *Planning and Environment Act 1987*.

Conditions in permits

If removal or variations of the covenant are approved, a mandatory condition will be included in relevant permits for use and development requiring the owner to ensure the relevant action by the Registrar of Titles to remove or vary the covenant is complete before the permit is effective. Any failure by an owner can then be pursued by either the responsible authority or another person as a prosecution or enforcement issue under the *Planning and Environment Act 1987* before the Magistrates Court or Victorian Civil and Administrative Tribunal rather than the Supreme Court.

This paper was published in the as a Planning Law Update in the Queensland Planner 40:4, 22-24, December 2000.



Our Leaders



Ben Caldwell
Partner
+61 7 3002 8734
0427 533 098
ben.caldwell@cbp.com.au



Todd Neal
Partner
+61 2 8281 4522
0411 267 530
todd.neal@cbp.com.au



David Passarella
Partner
+61 3 8624 2011
0402 029 743
david.passarella@cbp.com.au



Ian Wright
Senior Partner
+61 7 30002 8735
0438 481 683
ian.wright@cbp.com.au

Brisbane.

T +617 3002 8700
Level 35, 300 George Street
Brisbane QLD 4000 Australia
GPO Box 142, Brisbane QLD
4001 Australia

Melbourne.

T +613 8624 2000
Level 23, 181 William Street
Melbourne VIC 3000 Australia
GPO Box 4542, Melbourne VIC
3001 Australia

Sydney.

T +612 8281 4555
Level 42, 2 Park Street
Sydney NSW 2000 Australia
GPO Box 214, Sydney NSW
2001 Australia