

STUDENT PAPER

ENVIRONMENTAL REPORTING BY AUSTRALIAN CORPORATIONS

*Anna Topalov**

The demand for information regarding companies' environmental performance is increasing, as society's concerns about the environment are intensifying. This article identifies and examines various environmental reporting requirements in Australia and discusses the capability of the accounting information sub-system to generate and report environmental information in a company's financial reports. The article also develops a framework for evaluating environmental reporting and applies it to the environmental reporting of five Australian companies for the 1998 financial year. In addition, some problems associated with environmental reporting by companies in Australia are identified.

Introduction

Today there are a variety of environmental issues that may affect an organisation's profitability. These include local as well as global environmental problems, such as air and water pollution, land contamination and resources depletion.¹ In 1992, over 150 governments met to address these issues and pledged to work with industry to alleviate environmental problems.² Principle 10 of the Rio Declaration on Environment and Development states:

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment ... States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedies, shall be provided.³

* Anna Topalov is a Bachelor of Law and Accounting student in the Faculty of Law, Griffith University.

¹ P O'Callaghan (1996) *Integrated Environmental Management Handbook*, John Wiley & Sons, pp 3-4.

² A Hutchinson and F Hutchinson (1997) *Environmental Business Management*, McGraw-Hill, p 63.

³ V Bhat (1998) *Total Quality Environmental Management*, Quarum Books, p 219.

Thus the pressure is on corporations to disclose information about their environmental performance. This article examines the adequacy of environmental reporting in five Australian corporations.

Research Objectives

The objectives of this article are:

- ◊ to identify and discuss sources of mandatory and voluntary disclosure requirements;
- ◊ to develop an External Environmental Reporting Framework (EERF);
- ◊ to test the EERF by applying it to the environmental reporting of five Australian corporations;
- ◊ to identify and analyse the problems associated with environmental disclosure.

Structure

This article consists of several parts. The first part describes various mandatory and voluntary environmental reporting requirements applying to Australian corporations. In the second part, an external environmental reporting framework (EERF) is developed by identifying the role of accounting and the information needs of companies' stakeholders. The third part analyses whether Australian corporations meet the information needs of their stakeholders regarding the companies' environmental performance by applying the developed external environmental reporting framework to the annual reports of five Australian corporations for the 1997–98 financial year. The last part examines the difficulties likely to be encountered by companies in their environmental reporting.

Environmental Reporting Requirements

At present the disclosure of environmental performance information by corporations is required to various degrees from different sources. Some disclosure is required under different pieces of Commonwealth or state legislation, whilst other disclosure may be made voluntarily pursuant to agreements between companies in an industry or in order to comply with non-binding standards.

Reporting Requirements Under Legislation

Corporations Law

Until 1998 there was a lack of statutory requirements for environmental reporting to the public by Australian companies.⁴ In 1998 the *Company Law Review Act 1998* (Cth) introduced section 299(1)(f), which requires disclosure of a company's compliance with environmental legislation, where the entity is subject to 'any particular and significant environmental regulation under a law', as part of the directors' report.⁵

Practice Note 68 was released by the Australian Securities and Investment Commission to clarify the provision in several ways. First, the requirement primarily applies to entities that are either licensed or subject to conditions under environmental legislation or regulations. Secondly, the requirements are not related to financial disclosure or to the accounting concept of materiality. Thirdly, an entity cannot reduce the information to what it has not provided to a regulatory authority already. Lastly, the information must be less technical than that provided to environmental regulatory authorities.

The key to the provision is the interpretation of the words 'particular' and 'significant', which is likely to vary as there are over a thousand pieces of environmental legislation in Australia.⁶ These words suggest that a company should disclose information likely to affect the company's performance. The most obvious example is information related to the company's non-compliance with environmental legislation which may result in penalties or suspension or closing down of the company's operations. Other information may relate to the interests of particular stakeholders or to an activity which is publicly sensitive.⁷

Tax Legislation

The *Income Tax Assessment Act* provides that certain 'environmental expenses' are tax deductible.⁸ Thus an examination of the items deducted according to these provisions would reveal information about the company's environmental performance by disclosing the costs incurred by the company for environmental activities.

⁴ C Deegan (1998) 'Environmental Reporting in Australia' *Environmental and Planning Law Journal* 15(4), p 246 at 247.

⁵ J Peel, 'Reports Tinged with Green' (1998) 1 & 2 *Australian Environmental Law News* 41.

⁶ PWC, 'Environmental Reporting', (1998) 4 *PWC News & Views* 2, p 2; ANZECC (1997) *Guide to Environmental Legislation in Australia and NZ*, 5th edn, Deacons Graham & James.

⁷ For example, BHP's pollution in PNG, which attracted a lot of media attention.

⁸ Sections 82B–82BR *Income Tax Assessment Act 1936* (Cth), as amended in 1998.

Tax effect accounting⁹ may also provide information about a company's environmental performance. This can be done by looking at the differences between the company's expenses for tax and for accounting purposes, which are disclosed in the notes to the financial statements.¹⁰

Environmental Protection Legislation

The *Environmental Protection Act* 1994 (Qld) (EPA) provides that an administering authority may require a person to produce an environmental evaluation report¹¹ or an environmental management program.¹² The information disclosed in this way may be quite extensive.¹³ Furthermore, the authority may require any further information,¹⁴ and may also call a conference so as to decide, together with interested parties, whether to approve the program.¹⁵ Most of this information is available to the public for inspection.¹⁶

National Environmental Protection Measures (NEPMs)

Other sources of information about corporations' environmental performance are the databases created pursuant to the NEPMs made by the National Environmental Protection Council.¹⁷ Currently, there are three developed¹⁸ NEPMs and two others¹⁹ under development. These NEPMs require larger

⁹ There are differences in the accounting treatment of some income or expense items to their taxation treatment. These differences are either timing (e.g. depreciation) or permanent (amortisation of goodwill) differences. They are defined in AASB 1020.06. The former arise from including some items in the financial statements of a period different from that in which they are dealt with for taxation purposes. The latter arise where an income or expense item was included in the profit and loss but not in the calculated taxable income, or vice versa: J Irvine (1993) *Company Accounting Fundamentals*, Butterworths, pp 66–67.

¹⁰ *ibid.*, pp 66–67.

¹¹ ss 72 and 73 *EPA* 1994 (Qld).

¹² s 82 *EPA* 1994 (Qld).

¹³ For example, an environmental management program must state the objectives of the program and how and when they are to be achieved, as well as what performance indicators were used, and also ensure that there is monitoring and reporting compliance with the program: s 81 *EPA* 1994 (Qld).

¹⁴ s 86 *EPA* 1994 (Qld).

¹⁵ s 87 *EPA* 1994 (Qld).

¹⁶ ss 213 and 214 *EPA* 1994 (Qld).

¹⁷ This Council was established in 1994 (*Environmental Protection Council Act* 1994 (Cth)) pursuant to Part 2 of Schedule 4 of the Intergovernmental Agreement on the Environment, which was made in May 1992.

¹⁸ These are: the National Pollutant Inventory (NPI), the Ambient Air Quality and the Movement of Controlled Waste Between States and Territories NEPMs.

¹⁹ These are: the Used Packaging Materials and the Assessment of Contaminated Sites NEPMs.

industries to report on their environmental performance, such as pollutants emissions, annually.²⁰ Therefore, larger companies must devise ways of collecting, processing and reporting the required information. The information contained in the databases is intended to be made accessible to the public on the relevant NEPM Internet site,²¹ and also through municipal libraries and local government offices.

Eco-Labeling

Another type of environmental reporting is eco-labelling. In Australia, for example, there are mandatory legislative requirements²² for energy-efficiency labelling of prescribed electrical articles, such as dishwashers, refrigerators, freezers and air conditioners.²³

Voluntary Environmental Reporting

Under Legislation

Environmental legislation provides for voluntary information disclosure. For example, the *Environmental Protection Act 1994* (Qld) provides that a person may voluntarily submit a draft environmental management program,²⁴ or program notice.²⁵ The Act also states that the program notice and the documents submitted with it are not admissible in evidence against that person in a prosecution for the offence to which the notice related.²⁶ This provides an incentive for voluntary submission of information. These programs can be an important source of information about companies' environmental performance. This is because a licensee is required to give annual returns²⁷ until ceasing the activity.²⁸

Voluntary Industry Codes

Environmental reporting may also be made voluntarily by adopting voluntary industry reporting guidelines. An example is the Australian Minerals Industry

²⁰ S Streets and A Di Carlo (1999) 'Australia's First NEPMs' *Environmental and Planning Law Journal* 16(1), p 25 at 27.

²¹ For example, the Internet site for the NPI NEPM is www.environment.gov.au/net/npi.html.

²² Pursuant to regulations under various State Acts: *Electricity Act 1945* (NSW) s 37(2); *State Electricity Commission Act 1958* (Vic) ss 57 and 111; *Electricity Act 1994* (Qld) s 266; *Electrical Products Act 1988* (SA) s 8.

²³ A Bradbrook (1996) 'Eco-Labeling: Lessons from the Energy Sector' 18 *Adelaide Law Review* 35, pp 36–37.

²⁴ s 83 *EPA 1994* (Qld).

²⁵ s 101 *EPA 1994* (Qld).

²⁶ s 102 *EPA 1994* (Qld).

²⁷ s 95 *EPA 1994* (Qld).

²⁸ ss 99 and 100 *EPA 1994* (Qld).

Code for Environmental Management. It was created by mining organisations in Australia to deal with consultation, environmental performance, continual improvement and public reporting. It requires signatories to regularly report publicly on their implementation of the Code and environmental performance. Similar requirements are also contained in the Code of Environmental Practice of the Electricity Supply Association of Australia. Another voluntary initiative is the Greenhouse Challenge, which involves development and reporting on an organisation's targets for reducing its greenhouse gas emissions.²⁹

Other Voluntary Reporting Practices

The International Standards Organisation developed the ISO 14000 series as an international standard for approaching all aspects of environmental management in order to facilitate trade and reduce costs. It covers, among other things, specifications for developing environmental management systems (EMSs), general principles and supporting techniques, as well as auditing guidelines, and guidelines for performance evaluation.³⁰

However, the ISO 14000 series has been criticised for being process-based, which does not guarantee environmental performance outcomes, and also for only providing the minimum standards, and 'watering down' crucial sustainable development concepts³¹ in fear of creating legal obligations. A further problem with the series is its lack of requirement for regular environmental reporting.³² Therefore, although there is merit in the idea of creating standard international EMSs, the ISO 14000 series fails to deliver the needed results.

Environmental Reporting Framework

In order to meet their environmental reporting requirements, as outlined above, companies must develop systems for the collection, processing and reporting of relevant information. This part suggests that the accounting information system is capable of performing such a role. Furthermore, a framework is developed to guide companies regarding the type of information they need to disclose to satisfy the needs and wants of their stakeholders, as well as to evaluate reported environmental performance information.

²⁹ PWC Global Mining Group (1998) *Developments in Environmental Reporting in the Resources Industry*, PWC, p 3

³⁰ UNEP, *UNEP Financial Institutions Initiative: ISO 14001*, Fact Sheet No. 2, UNEP.

³¹ For example: pollution prevention, the polluter pays principle, public participation, initial environmental impact review and performance reporting.

³² N Gunningham and D Sinclair (1999) 'Environmental Management Systems, Regulation and the Pulp and Paper Industry' *Environmental and Planning Law Journal* 16(1), p 5 at 7–10.

Environmental Issues and the Role of Accounting

Accounting is part of an organisation's management information system (MIS) that 'measures, processes, and communicates financial information about an identifiable economic entity'.³³

Accounting is divided into managerial and financial accounting. These two types of accounting focus on meeting the needs of two different classes of information users: internal and external. Managerial accounting provides internal decision-makers with information about financing, investing and operating activities. Financial accounting provides reports to external decision-makers, to enable them to evaluate business performance.³⁴ Although there are other information systems,³⁵ it is only the accounting information sub-system that provides external decision-makers with useful information about the entity's performance.

Both types of accounting are constantly changing to meet the developing needs of internal and external users.³⁶ One such change is the development of social accounting, of which environmental accounting is part. Social accounting rests upon the assumption that organisations are accountable to society for their actions.³⁷ Such assumption appears to be shared to an extent by accounting standard setters in Australia.³⁸

The rationales for social accounting vary depending on the perspective from which it is presented. Stakeholders view it as an 'expression of the stewardship concept', a means of monitoring the enterprise's economic and environmental resources use — and, in so doing, a positive contribution to social welfare. However, from management's perspective, social accounting is a means of 'satisfying the socio-economic demands' placed upon an organisation³⁹ and gaining a competitive advantage.⁴⁰ In this article, the latter view is taken because ultimately it depends on an entity to decide what information is disclosed and how, subject to any disclosure requirements imposed upon the firm. Regardless of the approach taken, it is clear that environmental accounting is important because of the increasing relevance of environmental issues to all decision-makers. This is because of the increasing amount of environmental legislation and a widespread realisation that sustainable development is needed.⁴¹

³³ BE Needles et al. (1996) *Financial and Managerial Accounting*, Houghton Mifflin Company, pp 4 and 7.

³⁴ *ibid.*, p 6.

³⁵ Examples include design & engineering, production, inventories, marketing & sales, distribution and customer information systems: Needles (1996), p 639.

³⁶ Needles (1996), p 636.

³⁷ ASCPA (1995) *A Review of Environmental Accounting*, p 19.

³⁸ SAC 2, paragraph 14 states that organisations discharge their accountability to resource providers through general-purpose financial reports.

³⁹ ASCPA (1995) p 2.

⁴⁰ The Aspen Institute (1998) *Uncovering Value: Integrating Environmental and Financial Performance*, The Aspen Institute Publications Office, p 7.

⁴¹ *ibid.*, p 5.

Environmental accounting can be defined as: 'the generation, analysis and use of financial and non-financial information in order to optimise corporate environmental and economic performance and achieve sustainable business'.⁴² To cater for environmental accounting, the existing accounting system has to adapt to meet the increasing demand for information about an organisation's environmental performance. It must include environmental information that is financial and non-financial.⁴³ Accounting already provides useful non-financial information. Managerial accounting collects relevant information from all other information systems, and financial accounting reports may also include non-financial information.⁴⁴ Accounting does not currently provide financial environmental information. It can do so by treating the environment as a set of economic resources. Depletion of resources and pollution have given rise to arguments that resources cannot be treated as free goods any more, and that their direct or indirect value must be accounted for.⁴⁵ With this modification, accounting may include environmental accounting.

There are no limits on the nature of information provided in accounting reports for internal purposes. However, the Australian Statements of Accounting Concepts (SACs)⁴⁶ set guidelines for external reporting. The SACs identify the qualitative characteristics of the information to be reported,⁴⁷ as well as⁴⁸ the basic elements of the accounting reports and their recognition and measurement rules.⁴⁹ Does environmental accounting fit within the SACs?⁵⁰

The relevant elements, within which environmental matters must conform, are: asset, liability and expense. Their definitions do not directly exclude environmental matters. (Appendix A: SAC 4 — Definitions) However, the definition of 'asset' is problematic, as it requires that the entity must have the capacity 'to deny or regulate access of others' to the benefit. Furthermore, SAC 4, paragraph 27 states that 'general access to air and water does not qualify as an asset of the entities that use them', because access to them cannot be denied or regulated. Thus the environment can only be

⁴² M Bennett and P James (eds) (1998) *The Green Bottom Line: Environmental Accounting for Management*, Greenleaf Publishing, p 33.

⁴³ Above, n 40.

⁴⁴ SAC 2, para 10, which states that 'Financial reporting encompasses the provision of financial statements and related financial and other information ... This statement does not attempt to ... define the boundaries of general purpose financial reporting.'

⁴⁵ ASCPA (1995), pp 57-60.

⁴⁶ The SACs form the conceptual framework within which accounting disclosures are formulated for general-purpose financial reporting.

⁴⁷ SAC 3: relevance, reliability, comparability, timeliness and understandability.

⁴⁸ J Godfrey et al. (1997) *Accounting Theory*, 3rd edn, John Wiley & Sons, pp 367-69.

⁴⁹ SAC 4: assets, liabilities, equity, revenue, expenses and profit.

⁵⁰ ASCPA (1995) pp 57-60.

recognised as an asset where the entity can deny or regulate the access of others. Examples of environmental assets include natural resources used as input materials in a manufacturing process. However, where the item does not meet the recognition criteria, it can still be disclosed in the notes to the financial reports.

The definition of liabilities is not problematic for several reasons. First, the obligations may be equitable.⁵¹ Secondly, the inability to measure the liability does not preclude its recognition as it can be expressed as a range of possible values⁵² in the notes to the reports.⁵³ Thirdly, conditional liabilities may be recognised provided their occurrence is more likely than not.⁵⁴ An example of an environmental liability is a financial penalty under environmental legislation.

The definition of expenses also allows the incorporation of environmental factors. These will include those 'consumptions or losses of future economic benefits' arising out of transactions or events related to the environment. Energy costs are an example of environmental expenses.

Users of Environmental Performance Information

Environmental reporting is beneficial only if it meets the expectations and concerns of the organisation's stakeholders; otherwise it fails to meet the needs of the report's target audience. An organisation can only ascertain the benefit of environmental reporting if it identifies the potential users of such information, and the type of information they need.

The first step towards successful environmental reporting is to identify stakeholders and determine their information needs concerning an organisation's environmental performance. There are two groups of stakeholders: internal and external. The internal information users are the organisation's management. They are interested in the organisation's environmental performance to the extent that it relates to the firm's profitability, liquidity and sustainability.⁵⁵ External users include the organisation's investors and shareholders, creditors, regulatory agencies and bodies, and various other groups, such as unions, insurance companies, the media and the general public. This article focuses on the information needs of external stakeholders.

Framework for External Environmental Reporting

External stakeholders may further be subdivided into those with a financial interest, direct or indirect, in the organisation and those with a non-financial interest. This division is important as it indicates the nature of the information these groups of users may be interested in. In this part, a general framework

⁵¹ These arise out of social or moral sanctions or custom: SAC 4, para 55.

⁵² SAC 4, para 69.

⁵³ SAC 4, para 71.

⁵⁴ SAC 4, paras 66 and 67.

⁵⁵ Needles et al. (1996), p 7.

for external environmental reporting is developed⁵⁶ and presented in Appendix B.

Groups with Financial Interests

Stakeholders with a direct financial interest include shareholders, investors and creditors. Here, 'creditors' refers to banks, finance and mortgage companies, securities firms, insurance firms and suppliers.⁵⁷ These stakeholders are primarily interested in the organisation's profitability and liquidity in order to make their investment and lending decisions. They want information about the effect of an organisation's environmental performance on its financial performance. The groups with indirect financial interests are various regulatory authorities and bodies, the Taxation Department, and other groups, such as trade unions and professional advisers. These groups need environmental reporting to assess the organisation's penalty for any non-compliance with environmental laws, the extent of any allowable deductions for tax purposes, new areas for negotiations and the potential for 'green' insolvency,⁵⁸ respectively.

To meet these stakeholders' demands for information, companies must predominantly disclose information of a quantitative and financial nature. This information must address the nature and extent of the firm's environmental liabilities, capital expenditures and operating costs required by the firm to meet existing and anticipated regulations and potential litigation.⁵⁹ Thus these types of information comprise the first element of the framework — *Compliance with Environmental Laws and Regulations*. Examples of the information to be disclosed as part of this element are discussed below.

Environmental liabilities include both present and contingent liabilities. These usually arise from non-compliance with relevant environmental legislation. Liability may be potentially incurred after a disclosure of non-compliance by the firm pursuant to section 299(1)(f) of the *Corporations Law*, or in an environmental audit, or under relevant environmental protection legislation. Performance indicators for this element include the number of a

⁵⁶ Elements of three different other frameworks were adapted and incorporated as part of the framework developed here. These are: G Lamberton (1998) 'Exploring the Accounting Needs of an Ecologically Sustainable Organisation' *Accounting Forum* 22(2), p 186 at 195; C Deegan (1997) 'Environmental Performance Evaluation & Reporting for Private and Public Organisations' *Accounting Forum* 20(1), p 85 at 89; The United Nations Proposals on Environmental Accounting in R Gray (1998) 'Corporate Reporting for Sustainable Development: Accounting for Sustainability in AD2000', p 179.

⁵⁷ Needles et al. (1996), p 9.

⁵⁸ C Symes (1998) 'The Dawn of Green Corporate Insolvency Law: Environmental Accountability Creeping Over the Horizon' 9 *Australian Journal of Corporate Law* 64, pp 68–74. The article explores the potential liability of various parties in the event of a company's insolvency due to non-compliance with environmental laws.

⁵⁹ The Aspen Institute (1998), p 24.

firm's contraventions, and the amount of the financial penalties involved. Performance indicators of contingent liabilities include the number of environmental accidents and hazards reported.

Capital expenditure may be incurred either to comply with environmental laws and regulations or voluntarily so as to reduce internal costs. Capital expenditure may include information about a firm's products, recycling, energy and waste management. Performance indicators include expenditure on recycling, energy conservation and waste minimisation projects, and the costs of environmental risk-prevention projects.⁶⁰ Other indicators are any product development and packaging research and development.⁶¹

Environmental operating costs are those incurred in achieving eco-efficiency. Other related costs are clean-up costs. Performance indicators include the cost of input materials and energy expressed either on its own or as a percentage of the end product's cost. Another performance indicator is the cost of waste disposal per unit of output.

Groups with Other Interests

The external stakeholders with non-financial or indirect interests are governments and various regulatory authorities, the public in general, 'green' lobby groups and the media.

Governments, regulatory agencies and bodies need environmental reports for various reasons. These include evaluating an organisation's level of conformity with the objects of environmental laws and regulations. Another potential use of such information is to compile statistical and other information databases.⁶² This is essential, for example, for negotiating Australia's pollutant emissions quota. Companies' general external reports can be a useful source of information. However, government authorities are generally able to require specific environmental reports under various pieces of environmental legislation and regulations. Therefore, they are not the primary user target and are not considered further here.

Most organisations' customers are the members of the general public, who are increasingly becoming environmentally conscious. They want information about an organisation's commitment to the environment. Information likely to satisfy these needs includes a statement of any environmental policies and programs; certification and awards; eco-labelling; and other qualitative product or service related information.

The media are a powerful tool for influencing the general public on particular issues, including pollution.⁶³ Thus the attitude of the media to the

⁶⁰ G Lamberton (1998) 'Exploring the Accounting Needs of an Ecologically Sustainable Organisation' *Accounting Forum* 22(2), [186 at 195.

⁶¹ L Parker (1998) *Environmental Costing*, Management Accounting Centre of Excellence, p 18.

⁶² For example, the National Pollutant Inventory database.

⁶³ N Brown and C Deegan (1998) 'The Public Disclosure of Environmental Performance Information — A Dual Test of Media Agenda Setting Theory and Legitimacy Theory' *Accounting and Business Research* 29(1), p 21 at 25.

particular issue must be considered before making public disclosure of environmental performance. The media are particularly interested in environmental liabilities, risk management and the safety of products and services. This information is likely to be a source of negative coverage by the media.

An example of the media's negative attention to a potential environmental liability is the *Ok Tedi* case, which concerned an alleged pollution of the waters of the Ok Tedi River and adjacent land by the Ok Tedi mine. The mine was owned jointly by BHP, the Papua New Guinea government and a Canadian company. The media portrayed the settlement agreement as being made by BHP because it feared losing the court case. However, in reality BHP had successfully removed all causes of action against it, but one, before the settlement.⁶⁴ Negative media coverage played an important role in shaping the public's opinion on the issue.

Environmental Reporting in Practice

This section analyses the environmental reporting of five companies by examining the type and nature of information provided to stakeholders. Information that stakeholders expect but which is not provided is also identified. The method of analysis involves examining the information in the order in which it is presented in the reports, rather than in the order in which the framework orders it. The framework is then applied to the results of the analysis in order to determine whether the companies meet their stakeholders' expectations and also to carry out a comparison between the companies' reporting. Furthermore, the companies' level of environmental reporting is rated based on the information identified in the reporting framework.

The companies selected for analysis are BHP, Stanwell Corporation Limited (SCL), Energex, The Body Shop and Blackmores Limited. They were chosen because they are well-known companies, which operate in different industries: mining, energy, cosmetics and natural health products. Thus it will be demonstrated that the framework can be applied to the environmental reporting of companies regardless of the industry they are in. Stanwell Corporation Limited and Energex are both in the energy industry, but have been analysed to demonstrate how companies within the same industry can be compared using the reporting evaluation framework.

Energex

The 1998 annual report of Energex does not provide financial environmental information provided in the financial statements and the notes to them.⁶⁵ But the company addressed the corporation's environmental performance in the statements of the Environment and Marketing Managers.⁶⁶ This information is

⁶⁴ J Cameron and R Ramsay (1996) 'Transnational Environmental Disputes' 1(1) *APJEL* 5, pp 7-11.

⁶⁵ Energex (1998) '1997/98 Annual Report', pp 64-88.

⁶⁶ *ibid.*, pp 22-23, 48-49.

brief and related to certification, the Greenhouse challenge and community involvement.

However, the environmental performance of Energex is reported in a separate, 27-page, environmental report.⁶⁷ Its contents are outlined below.

The report gives a brief introduction to the company and states that the Environmental Management System (EMS) of Energex is certified according to ISO 14001.⁶⁸ The growing commitment to the environment is discussed by the company's CEOs over two pages.⁶⁹ The information in this section is qualitative except for stating a target improvement of 37 per cent for its Greenhouse gas emissions, pursuant to the Greenhouse Challenge. Afterwards, the environmental policy and vision, and the responsible staff, are described.⁷⁰

The next section describes the environmental achievements of Energex.⁷¹ These, once again, include ISO 14001 certification and adopting the Greenhouse Challenge. Other qualitatively described achievements are increasing employees' environmental awareness and introducing its 'earth's choice program', whereby renewable energy sources are offered to customers. Various other activities are also described, such as industry forum participation, wildlife conservation commitment, the introduction of school projects and conducting seminars. Other achievements include internal performance auditing, property disposal, and a review of work procedures. All information within this section is qualitative and presented in a narrative form, without any pictures.

The next section describes the environmental challenges facing Energex in the form of a narrative and without any quantitative or financial information.⁷² These include the integration of its gas business, extending the 'earth's choice' program, promotion of plant vegetation, ongoing reporting, and environmental knowledge sharing.

The next section identifies and describes in narrative form the environmental issues that will be addressed by Energex.⁷³ There are no specific targets identified and no quantitative or financial information about these is provided. The report then concludes with a short external audit statement and summary,⁷⁴ and a statement that there were no environmental non-compliance notices served on Energex in the 1998 financial year.⁷⁵

⁶⁷ Energex (1998) *1997/98 Environmental Performance Report* Energex.

⁶⁸ *ibid.*, p 3.

⁶⁹ *ibid.*, pp 4–5.

⁷⁰ *ibid.*, pp 6, 7 and 8–9.

⁷¹ *ibid.*, pp 10–17.

⁷² *ibid.*, pp 18–19.

⁷³ *ibid.*, pp 20–23.

⁷⁴ *ibid.*, pp 24–26.

⁷⁵ *ibid.*, p 27.

Stanwell Corporation Ltd (SCL)

SCL addresses the environment in its 1998 annual report but states that for comprehensive information one must refer to its environmental report.⁷⁶ There is no environmental financial information in the financial statements and the notes to them.⁷⁷

The SCL environmental performance report consists of 24 pages.⁷⁸ The report begins with a statement of the company's CEO. He draws attention to SCL's certification to ISO 14001 international standard and its adoption of the Electricity Supply Association of Australia (ESAA's) Code of Environmental Practice, as well as the Greenhouse Challenge program.⁷⁹ SCL's environmental 'highlights' and challenges are described, with the corporation's environmental policy and management following in narrative form.⁸⁰

Afterwards, a case study is included,⁸¹ as well as a description of SCL's environmental initiatives pursuant to the adopted ESAA Code and the Greenhouse Challenge.⁸² These do not provide any quantitative or financial information.

Other matters described in the report are SCL's generation of alternative energy sources⁸³ and its interaction with the community, employees and contractors.⁸⁴ The company's past and future commitment to environmental reporting is expressed in a table.⁸⁵

The next section is devoted to SCL's commitment to the Greenhouse Challenge Cooperative Agreement. Its actions are described, emission targets and actual emissions are quantified and percentage improvements are also included in a table format.⁸⁶

Various other environmental issues are then examined. These include incidents and complaints, waste management and recycling programs,⁸⁷ waste, air and land management by site.⁸⁸ These issues are both qualitatively and quantitatively discussed. However, the report contains neither an audit statement nor a disclaimer.

⁷⁶ Stanwell Corporation Limited (1998) *1998 Annual Report*, Stanwell Corporation Limited Australia, pp 20–21.

⁷⁷ *ibid.*, pp 29–53.

⁷⁸ Stanwell Corporation Limited (1998) *1997–1998 Environmental Performance Report* Stanwell Corporation Limited Australia.

⁷⁹ *ibid.*, p 1.

⁸⁰ *ibid.*, pp 3, 4 and 5.

⁸¹ *ibid.*, p 6.

⁸² *ibid.*, pp 7–8.

⁸³ *ibid.*, pp 9–10.

⁸⁴ *ibid.*, pp 11–13.

⁸⁵ *ibid.*, p 14.

⁸⁶ *ibid.*, pp 15–16.

⁸⁷ *ibid.*, p 17.

⁸⁸ *ibid.*, pp 18–24.

BHP Ltd (BHP)

BHP's annual report for 1998 describes the company's commitment to the environment, its environmental policy and environmental management practices in a separate section entitled 'Responsible Corporate Citizen'.⁸⁹ This section refers to the company's 72-page environmental report.⁹⁰ The 1998 environmental report provides a brief introduction to the company and its 'responsible approach' to the environment.⁹¹ This consists of a statement of the company's environmental policy and numerous case studies, which describe the approach taken to identifying and managing different environmental risks at various sites.⁹² This section is descriptive, without any quantitative or financial information, and full of colour photographs. The matters described include preventative measures, resource conservation and clean production, product awareness, remediation and land contamination. The latter hints at the possibility of associated contingent liabilities, but none is revealed in this section of the report.

BHP's environmental management is briefly described.⁹³ This is followed by an extensive analysis of the company's environmental performance over 13 pages.⁹⁴ This section contains a lot of information relevant to the needs of stakeholders.

First, the company's environmental compliance is addressed by disclosing and describing the number of 'significant incidents' and 'non-conformances' in a tabular format.⁹⁵ The fines and financial penalties imposed on the different business areas are also reported in a table and the trend in the number of fines and penalty costs is presented in a line chart.⁹⁶

Secondly, energy production, consumption and intensity⁹⁷ are presented in bar and pie charts and attributed to BHP's products and activities. Such data for the previous six financial years are also included in order to demonstrate any trends.⁹⁸

Thirdly, water use and pollution are also described graphically, and the information divided by product or service. The number of water pollution incidents is not provided, but accidental pollution is represented in a bar chart for the past three financial years. This is further explained in a narrative,

⁸⁹ BHP (1998) *Report to Shareholders 98*, The BHP Company Limited, Australia, pp 18–19.

⁹⁰ BHP (1998) *Environment Report 1998*, The BHP Company Limited, Australia.

⁹¹ *ibid.*, p 5.

⁹² *ibid.*, pp 8–41.

⁹³ *ibid.*, p 42.

⁹⁴ *ibid.*, pp 43–55.

⁹⁵ *ibid.*, pp 44–45.

⁹⁶ *ibid.*, p 46.

⁹⁷ This is the amount of energy required to produce one unit of output or activity.

⁹⁸ BHP (1998b), pp 47–49.

which states that BHP is complying with the relevant regulatory requirements.⁹⁹

Similarly, land use and rehabilitation are represented in a bar chart for the past three financial years by type of activity and type of mineral, rather than mining site. The analysis of land use is over only half a page.¹⁰⁰

Fifth, air pollutant emissions for a number of prior financial years are analysed and represented graphically in bar charts. The emissions include greenhouse gases, ozone depleting substances, oxides of sulphur and nitrogen, particulates and dioxins. The sources of these emissions are also identified for this and the past two financial years.¹⁰¹

Finally, this section describes briefly in a narrative BHP's waste and recycling targets.¹⁰² The report then concludes with an independent Data Verification Statement¹⁰³ and a number of appendixes, which summarise the presented environmental performance information in a table.¹⁰⁴

A glossary of terms is also provided,¹⁰⁵ as well as a feedback form and contact details. The report does not contain a disclaimer of any liability arising from the information provided.

The Body Shop

The Body Shop does not provide any information about its environmental performance in its annual report. However, it prepares a report which incorporates a Social Audit, Environmental Statement and an Animal Protection Statement.¹⁰⁶ The environmental performance of The Body Shop is discussed in the Environmental Statement section of the report, which is 27 pages long.¹⁰⁷

This section begins with an independent Verification Statement,¹⁰⁸ and then proceeds to describe The Body Shop's environmental policy.¹⁰⁹ The report is then divided into sections dealing with each element of the environmental policy. The policy elements are: thinking globally;¹¹⁰ striving for excellence;¹¹¹ searching for sustainability;¹¹² managing growth,¹¹³

⁹⁹ *ibid.*, pp 49–50.

¹⁰⁰ *ibid.*, p 50.

¹⁰¹ *ibid.*, pp 51–55.

¹⁰² *ibid.*, p 55.

¹⁰³ *ibid.*, p 56.

¹⁰⁴ *ibid.*, pp 57–69.

¹⁰⁵ *ibid.*, pp 70–71.

¹⁰⁶ The Body Shop (1998) *The Body Shop Results 1998: The New Bottom Line*, The Body Shop Australia and New Zealand.

¹⁰⁷ *ibid.*, pp 37–63.

¹⁰⁸ *ibid.*, p 39.

¹⁰⁹ *ibid.*, p 40.

¹¹⁰ *ibid.*, p 41.

¹¹¹ *ibid.*, pp 41–44.

¹¹² *ibid.*, pp 45–48.

energy¹¹⁴ and waste;¹¹⁵ controlling pollution;¹¹⁶ operating safety and legal requirements;¹¹⁷ and raising awareness.¹¹⁸

The targets and aims for each element and the extent to which they are achieved are clearly stated in every section. Most of the information is qualitative, but some quantitative information is also presented. Quantitative information includes: energy consumption;¹¹⁹ the number of refilled and recycled bottles;¹²⁰ and Greenhouse gas emissions from different activities.¹²¹ Although the information about The Body Shop's energy consumption and waste processing is also included in table format, most of the quantitative information is included in the narrative and thus is difficult to see at first glance. There is no financial information disclosed, either relating to environmental costs or liabilities or assets. In addition, there is no information about the environmental performance of The Body Shop associated with the manufacturing of its products.

The Body Shop does not identify any non-compliance with legislative requirements, and has not been prosecuted by any regulatory authority.¹²² Lastly, the report identifies the environmental organisations in which The Body Shop has membership and environmental campaigns it is involved in.¹²³ The Body Shop also expresses its commitment to annual environmental reporting.

This section does not contain any disclaimer of liability. A glossary of terms is also included,¹²⁴ as well as a feedback form and contact details of the company's Environmental Management Coordinator.¹²⁵

Blackmores Limited

The 1997 Annual Report of Blackmores is used for the purposes of this article because it includes the most recent environmental reporting of the company. This annual report contains a section titled 'Blackmores and the Environment', which mentions that 'new initiatives in packaging, recycling, waste reduction and disposal, and energy audits' have been implemented.¹²⁶ However, these are not elaborated upon at this stage. The report also informs

¹¹³ *ibid.*, p 49.

¹¹⁴ *ibid.*, pp 50–53.

¹¹⁵ *ibid.*, pp 54–56.

¹¹⁶ *ibid.*, pp 57–59.

¹¹⁷ *ibid.*, p 60.

¹¹⁸ *ibid.*, pp 61–62.

¹¹⁹ *ibid.*, pp 50–51.

¹²⁰ *ibid.*, pp 54–56.

¹²¹ *ibid.*, p 57.

¹²² *ibid.*, p 60.

¹²³ *ibid.*, pp 61–62.

¹²⁴ *ibid.*, pp 63 and 74–75.

¹²⁵ *ibid.*, p 63.

¹²⁶ Blackmores Limited (1997) *1997 Annual Report*, Blackmores Limited, p 8.

readers that the company funds the Manly Environment Centre and is also involved as a co-founder of a community project, 'Kids, Companies and Creeks', that has been nationally acknowledged.¹²⁷ In addition, information about waste recycling, reusing or reselling is included, some of which is quantitative.¹²⁸ One target for environmental performance is also mentioned: 'zero waste'.¹²⁹

Ratings

The summary of the information (Appendix C) reveals that, although Energex produced a long environmental report, that report fails to meet the information needs of its stakeholders for two main reasons. First, there is no quantitative or financial information provided at all. And second, environmental assets, liabilities (actual or contingent) and expenditure are not addressed. Therefore, the report provides only superficial coverage of the environmental performance of Energex, which may meet the expectations of stakeholders without a financial interest in the company, but does not meet the needs of those with financial interests.

The application of the framework reveals that the environmental report of Stanwell Corporation Limited does not include information about key performance indicators. First, there is no information about the company's environmental assets, liabilities and expenditure, or any financial penalties. Second, environmental risk management is omitted. Therefore, this report is likely to meet the information needs of stakeholders without a financial interest and, to an extent, the expectations of stakeholders with financial interests. Overall, the report is better than that of Energex (see Appendix C).

The summary of the information indicates that BHP's environmental report meets most of the information expectations of its stakeholders. However, the report still needs some improvement. First, in the descriptive part of the report, there is no reference to the quantitative information contained at the back of the report. Secondly, the quantitative information is presented predominantly graphically, rather than in a table format. Thus this information is not as informative to stakeholders with financial interests due to the inherent problems associated with this type of presentation format. Thirdly, the company's environmental assets, liabilities (present and contingent) and expenditure are not disclosed. Fourth, the information is not divided by jurisdiction but by product or service. Overall, however, BHP's environmental report contains more relevant information and is therefore better than the preceding two reports (see Appendix C).

The evaluation framework reveals that, to the extent that it is applicable to its business, The Body Shop discloses relevant information about its environmental commitment. Furthermore, the report is readable and logically arranged. However, it still omits to disclose, in financial terms, the

¹²⁷ *ibid.*, p 12.

¹²⁸ *ibid.*

¹²⁹ *ibid.*

environmental costs, expenditure and liabilities of the company, as well the environmental performance associated with the production process (see Appendix C).

The framework's application indicates that Blackmores Limited needs to expand the information it provides about its environmental performance in order to provide adequate information to its stakeholders. For example, the report could elaborate on the company's environmental targets and initiatives, and state clearly its environmental policy and programs. Any certification or awards also need to be stated or obtained. But most importantly, it must report annually. A possible reason for the limited amount of information provided is that the company does not perceive itself as being in a position to harm the environment and thus has no information to disclose (see Appendix C).

Therefore, the ratings (where 1 is the best and 5 is the worst) of environmental performance are as follows:

- 1 *BHP*: It reports the most financial or quantitative, and qualitative information.
- 2 *Stanwell Corporation Ltd*: Reports an equal number of quantitative or financial information to The Body Shop, and it reports the second largest amount of qualitative information (after BHP).
- 3 *The Body Shop*: Expresses as many performance indicators quantitatively, but also reports the third largest number of performance indicators qualitatively.
- 4 *Energex*: Does not provide any quantitative or financial information, but its report is better than that of Blackmores because it addresses a larger number of performance indicators qualitatively and includes a much larger amount of information, as well as committing itself to annual environmental reporting.
- 5 *Blackmores Limited*: Does not report regularly on its environmental performance, and the information it does provide is very limited.

Problems Associated with Environmental Reporting

The application of the reporting framework to the environmental performance information provided by these Australian companies indicates that there is a definite abstinence from disclosure of information in financial terms, as well as any negative information. There are various possible explanations for this, but this article identifies four major obstacles in the path of full and frank disclosure of environmental performance by corporations in Australia: lack of corporate privilege against self-incrimination; management's personal motives; problems associated with measurement; and obtaining independent verification.

No Corporate Privilege

Corporations have a major problem with the disclosure of their environmental performance due to decisions in two Australian cases. First, *EPA v Caltex*¹³⁰ involved prosecution based on information disclosed in the internal environmental audit of Caltex.¹³¹ There the High Court held by majority¹³² that the privilege against self-incrimination was not available to corporations. In the second case, *TPC v Abbco Iceworks*,¹³³ the Full Federal Court held by majority¹³⁴ that privilege against self-exposure to penalty was also not available to corporations.¹³⁵

These decisions no doubt act as a substantial disincentive to corporate disclosure of any information that may potentially involve the company in litigation. This includes information relating to a company's environmental legislation compliance, as the penalty for non-compliance may be significant to the company. For example, in Queensland a corporation may face a penalty of up to \$1249.50 for wilful and unlawful serious environmental harm.¹³⁶

Management's Personal Motives

Any disclosure by a company about its performance would be made with the approval of its directors, because it usually is disclosed within the Directors' Report.¹³⁷ Therefore, the directors' personal motives may affect their decision regarding the corporation's environmental performance disclosure.

The imposition of liability upon a company's executive officers where the company commits an offence against some environmental acts is a major disincentive for disclosure.¹³⁸ Furthermore, if directors allow for potentially

¹³⁰ (1993) 178 CLR 477 — referred to as the *Caltex* case. In that case, Caltex Refining Co was trying to claim the privilege so as to avoid producing documents required under s 29(2)(a) of the *Clean Water Act* 1970 (NSW) and under the rules of the NSW Land and Environment Court.

¹³¹ C Fayers (1998) 'Environmental Reporting and Changing Corporate Environmental Performance' *Accounting Forum* 22(1), p 74 at 87–88.

¹³² Four to three.

¹³³ (1994) 52 FCR 96 — referred to as the *Abbco* case. In that case, Abbco Iceworks tried to rely on this privilege to avoid producing documents in an action against them for breach of ss 45 and 45A of the *Trade Practices Act* 1974 (Cth).

¹³⁴ Four to one.

¹³⁵ J Puls (1996) 'Corporate Privilege' October *EPLJ* 364, p 366.

¹³⁶ s 120(1) *Environmental Protection Act* 1994 (Qld); R Mulheron (1996) 'Criminal Enforcement of Environmental Law' 26 *Queensland Law Society Journal* 427, p 428.

¹³⁷ Deegan (1998), p 247.

¹³⁸ *Environmental Protection Act* 1994 (Qld) ss 182–183; *EPA* 1993 (SA) s 129; *Environmental Management and Pollution Control Act* 1994 (Tas) s 60; *EPA* 1986 (WA) s 118; *EPA* 1970 (Vic) s 66B; *Environmental Offences and Penalties Act* 1989 (NSW) s 10, in S Streets (1998) 'Prosecuting Directors and Managers in Australia' 22 *MULR* 693, pp 693, 695 and 716–18.

incriminating information to be released, they may not be able to raise the due diligence defence¹³⁹ to personal liability.

A related disincentive for disclosure is the lack of corporate privilege against self-incrimination and self-exposure to penalty. This is because an enforcement agency could gather incriminating information through taking action against the company in order to avoid the corporate officers' privileges¹⁴⁰ and the problems associated with prosecuting individual corporate officers.¹⁴¹

Furthermore, a corporation's executive officers usually cannot insure themselves for breach of environmental legislation and for claims by or on behalf of the company itself against them.¹⁴² This could motivate directors against disclosure for two reasons. Firstly, the penalty they face for breach of environmental legislation could be substantial¹⁴³ and they would not be indemnified for it. Secondly, they could be held liable for their company's debts, which occurred while the company was insolvent.¹⁴⁴ Such costs include the costs of cleaning up pollution, which are very high. For example, the cost of sampling for land contamination is about \$40 000 and the cost of site remediation can vary between \$1 million and \$10 million.¹⁴⁵

Measurement Problems

There are various measurement issues related to environmental disclosure that need to be resolved. One issue concerns the scope of the definitions of 'assets' and 'liabilities' in SAC 4 as they relate to the environment. One example is the requirement that the economic entity has 'control' over the resource for it to be classified as an 'asset'. Another issue is the applicability of the 'materiality' concept to the environment. Furthermore, there is a problem with quantifying the value of the environmental 'assets', because such value would necessarily involve a subjective component.¹⁴⁶ This also involves measuring the social value of the environment. Moreover, the consumption of 'free

¹³⁹ J McDonald (1993) *Corporate Accountability — Criminal & Civil Liability*, Part 2, BLEC Books, pp 181–82.

¹⁴⁰ Puls (1996), p 369.

¹⁴¹ These include: the high cost of resources, the problem of determining internal accountability, the expendability of officers, the veil of incorporation and the difficulty with attribution of fault in negligence actions, in K Bubna-Litic (1995) 'Criminal Liability of Company Directors for Pollution Damage' 4 *AJCL* 417, pp 418–19.

¹⁴² S Ansell (1995) 'Directors' and Officers' Liability Insurance' 23 *Australian Business Law Review* 164, p 168.

¹⁴³ An individual can be fined up to \$249 900 or imprisoned for five years for wilful and unlawful serious environmental harm under the *Environmental Protection Act* 1994 (Qld), or imprisoned for seven years in NSW, SA and Victoria.

¹⁴⁴ s 588G *Corporations Law*.

¹⁴⁵ M Sneddon (1997) 'Liability for Insolvent Polluters' 5 *Insolvency Law Journal* 65, pp 71–72.

¹⁴⁶ Deegan (1998), p 256.

goods', such as most environmental resources, is not presently captured and reported as 'expenses' by the accounting system.¹⁴⁷

Independent Verification

Corporations benefit from environmental performance disclosure if such information is seen as reliable and objective by stakeholders. Thus it is essential that companies undertake independent environmental audits as well. There are various types of environmental audits to satisfy the needs of different stakeholders — for example, audits in relation to statutory compliance, physical risks and hazards on site, financial risk management, financial agreements and insurance contracts.¹⁴⁸

However, there are two problems associated with revealing the results of environmental audits. The first is the lack of uniform standards for the performance of such audits. The second is the fear that the company might be fined or prosecuted on the basis of information contained in the audit report, as in the *Caltex* case.¹⁴⁹

Conclusions

Mandatory environmental reporting requirements are increasing and their coverage is widening. Furthermore, the information is often made publicly available. There is also a trend towards increasing commitment to voluntary disclosure agreements by Australian corporations, despite the numerous problems facing them. However, an analysis of some of these reports indicate that reporting commitments are largely superficial in that the financial information is scant.

The MIS can be used to generate the information required by corporations' stakeholders. This information can then be reported by employing environmental accounting, although the information need not be part of the financial statements.

The framework developed in this article is easily applied to any environmental performance reported by corporations. It also incorporates a range of environmental performance indicators, enabling a thorough evaluation of environmental reports. Third, it enables an evaluation of the usefulness of the report to stakeholders. Fourth, it provides a benchmark for environmental reporting. Finally, the framework is applicable and is easily adaptable to the information reported in a range of industries. The framework's limitation is that it does not prescribe the presentation format for reporting the environmental indicators.

¹⁴⁷ Deegan (1996) 'Environmental Reporting for Australian Corporations' 13(2) *E&PLJ* 120, pp 122–23.

¹⁴⁸ BLEC Books (eds) (1993) *Environmental Liability Law*, Part 1, p 156.

¹⁴⁹ Fayers (1998) p 87; N Gunningham and D Sinclair (1998) 'New Generation Environmental Policy' 22(3) *MULR* 592, p 597.

References

Books and Articles

- ANZECC (1997) *Guide to Environmental Legislation in Australia and NZ*, 5th edn, Deacons Graham & James.
- ASCPA (1995) *A Review of Environmental Accounting*, Public Sector Accounting Centre of Excellence.
- Ansell, S 'Directors' and Officers' Liability Insurance — Recent Reforms and Developments in Australia and NZ' (1995) 23 *Australian Business Law Review* 164.
- Bennett and James, P (eds) (1998) *The Green Bottom Line: Environmental Accounting for Management*, Greenleaf Publishing.
- Bhat, V (1998) *Total Quality Environmental Management — ISO 14000 Approach*, Quarum Books.
- Bradbrook, A, 'Eco-Labeling: Lessons from the Energy Sector' (1996) 18 *Adelaide Law Review* 35.
- Brown, N and Deegan, C (1998) 'The Public Disclosure of Environmental Performance Information — a Dual Test of Media Agenda Setting Theory and Legitimacy Theory', *Accounting and Business Research* 29(1), p 21.
- Bubna-Litic, K, 'Criminal Liability of Company Directors for Pollution Damage' (1995) 4 *AJCL* 417.
- Deegan, C (1996) 'Environmental Reporting for Australian Corporations: An Analysis of Contemporary Australian and Overseas Environmental Reporting Practices', *Environmental and Planning Law Journal* 13(2), p 120.
- (1997) 'Environmental Performance Evaluation & Reporting for Private and Public Organisations', *Accounting Forum* 20(1), p 85.
- (1998) 'Environmental Reporting in Australia: We're Moving Along the Road, But There's Still a Long Way to Go', *Environmental and Planning Law Journal* 15(4), p 246.
- Fayers, C (1998) 'Environmental Reporting and Changing Corporate Environmental Performance', *Accounting Forum* 22(1), p 74.
- BLEC Books (eds) (1993) *Environmental Liability Law, Part 1*.
- Gray, R (1996) 'Corporate Reporting for Sustainable Development: Accounting for Sustainability in AD2000', in R Welford and R Starkey (eds), *Business and the Environment*, Earthscan Publications.
- Godfrey, J et al. (1997) *Accounting Theory*, 3rd edn, John Wiley & Sons.
- Gunningham, N and Sinclair, D (1999) 'Environmental Management Systems, Regulation and the Pulp and Paper Industry', *Environmental and Planning Law Journal* 16(1), p 5.
- (1998) 'New Generation Environmental Policy: Environmental Management Systems and Regulatory Reform', *Melbourne University Law Review* 22(3), p 592.
- Hutchinson, A and Hutchinson, F (1997) *Environmental Business Management: Sustainable Development in the New Millennium*, McGraw Hill.
- Irvine, J (1993) *Company Accounting Fundamentals*, Butterworths.
- Lamberton, G (1998) 'Exploring the Accounting Needs of an Ecologically Sustainable Organisation' *Accounting Forum* 22(2), p 186.
- Ledgerwood, G (1997) *Greening the Boardroom: Corporate Environmental Governance and Business Sustainability*, Greenleaf Publications.
- McDonald, J (1993) 'Developments in Civil and Criminal Liability' in *Corporate Accountability — Criminal & Civil Liability, Part 2*, BLEC Books.

- Mulheron, R, 'Criminal Enforcement of Environmental Law: Limitations & "Flat Earth Thinking" Sanctions' (1996) 26 *Queensland Law Society Journal* 427.
- Needles, B et al. (1996) *Financial and Managerial Accounting*, 4th edn, Houghton Mifflin Company.
- O'Callaghan, P (1996) *Integrated Environmental Management Handbook*, John Wiley & Sons.
- Parker, C (ed) (1998) *1998 Accounting and Auditing Handbook, Part 1*, Prentice Hall.
- Parker, L (1998) *Environmental Costing*, Management Accounting Centre of Excellence.
- Peel, J, 'Reports Tinged with Green' (1998) 1 & 2 *Australian Environmental Law News* 41.
- Puls, J (1996) 'Corporate Privilege — Do Directors Really Have a Right to Silence Since Caltex and Abbco Iceworks?', *Environmental and Planning Law Journal*, October, p 364.
- PricewaterhouseCoopers Global Mining Group (1998) *Developments in Environmental Reporting in the Resources Industry*, PricewaterhouseCoopers.
- 'Environmental Reporting' (1998) 4 *PWC News & Views* 2.
- Sneddon, M, 'Liability for Insolvent Polluters' (1997) 5 *Insolvency Law Journal* 65.
- Streets, S, 'Prosecuting Directors and Managers in Australia: A Brave New Response to an Old Problem?' (1998) 22 *Melbourne University Law Review* 693.
- Streets, S and Di Carlo, A (1999) 'Australia's First NEPMs' *Environmental and Planning Law Journal* 16(1), p 25.
- Symes, C, 'The Dawn of Green Corporate Insolvency Law: Environmental Accountability Creeping Over the Horizon' (1998) 9 *Australian Journal of Corporate Law* 64.
- The Aspen Institute (1998) *Uncovering Value: Integrating Environmental and Financial Performance*, The Aspen Institute Publications Office.
- UNEP, 'UNEP Financial Institutions Initiative: ISO 14001', Fact Sheet No. 2, UNEP.
- Van Meer, G (1993) *Taxation as an Instrument to Control/Prevent Environmental Abuse*, Massey University.

Legislation and Cases

Corporations Law

Environmental Protection Act 1994 (Qld)

Income Tax Assessment Act 1936

EPA v Caltex (1993) 178 CLR 477

TPA v Abbco Iceworks (1994) 52 FCR 96

Annual and Environmental Company Reports

Stanwell Corporation Limited (1998a) *1998 Annual Report*, Stanwell Corporation Limited Australia.

— (1998b) *1997–1998 Environmental Performance Report*, Stanwell Corporation Limited Australia.

Energex (1998a) *1997/98 Annual Report*, Energex.

— (1998b) *1997/98 Environmental Performance Report*, Energex.

The Body Shop (1998a) *1998 Annual Report*, The Body Shop Australia and New Zealand.

— (1998b) *The Body Shop Results 1998: The New Bottom Line*, The Body Shop Australia and New Zealand.

Blackmores Limited (1998) *1998 Annual Report*, Blackmores Limited.

- (1997) *1997 Annual Report*, Blackmores Limited.
- BHP (1998a) *Report to Shareholders 98*, BHP Australia.
- (1998b) *Environment Report 1998*, BHP Australia.

Appendix A: SAC 4 — Definitions

- ◇ *Assets* — ‘Assets’ are future economic benefits controlled by the entity as a result of past transactions or other past events.

- ◇ *Liabilities* — ‘Liabilities’ are the future sacrifices of economic benefits that the entity is presently obliged to make to other entities as a result of past transactions or other past events.

- ◇ *Expenses* — ‘Expenses’ are consumptions or losses of future economic benefits in the form of reductions in assets or increases in liabilities of the entity, other than those relating to distributions to owners, that result in a decrease in equity during the reporting period.

Source: C Parker (ed) (1998) *1998 Accounting and Auditing Handbook*, Part 1, Prentice Hall.

Appendix B: External Environmental Reporting Framework

<i>External user groups</i>	<i>With financial interests</i>		<i>Without financial interests</i>	
	<i>Fin./quant.</i>	<i>Quant.</i>	<i>Fin./quant.</i>	<i>Quant.</i>
<i>Nature of information</i>				
Performance indicators				
<i>Compliance with env. laws and regulations</i>				
• Contraventions	X	X	X	X
• Penalties (fin. and other)	X			
• Costs of compliance	X			
<i>Commitment to environment</i>				
• Env. policies, programs, budgets	X	X		X
• Env. risk management (hazards, accidents, remediation)	X	X	X	X
• Pollutant emissions	X		X	
• Env. assets, liabilities, expenditure, contingent liabilities (voluntary & compliance)	X		X	
• Other env. performance parameters (waste disposal, energy, eco-efficiency, product devt, packaging, recycling, sustainable use of natural resources)	X			X
<i>Env. auditor's statement</i>		X		X
• Internal				
• External				
<i>Disclaimer</i>		X		X
<i>Ongoing environmental reporting commitment</i>		X		X

Appendix C: External Environmental Reporting Framework Applied

Nature of information	Information provided by companies				
	Financial/ quantitative		Qualitative		
Performance indicators					
<i>Compliance with environmental laws and regulations</i>					
• Contraventions	2		1	2	
• Penalties (financial and other)	2				
• Costs of compliance					
<i>Commitment to environment</i>					
• Env. policies, programs, budgets			1	2	3 4
• Environmental risk management (hazards, accidents, remediation)	2		1	2	4
• Pollutant emissions	1	2	4	1	2 4
• Env. assets, liabilities, expenditure, contingent liabilities (voluntary & compliance)				2	
• Other environmental performance parameters					
— waste disposal	1	2		5	1 2 3 4 5
— energy, eco-efficiency	1	2	4		1 2 5
— product devt				1	3
— packaging				1	
— recycling		2	4	5	1 2 5
— sustainable use of natural resources)	1	2	4		1 2 4
• Certification, awards and eco-labelling				1	2 3 4
<i>Env. auditor's statement</i>					
• Internal				2	4
• External				2	3 4
<i>Disclaimer</i>					
<i>Ongoing environmental reporting commitment</i>				1	2 4
Legend:					
Stanwell Corporation Ltd	1				
BHP Ltd	2				
Energex	3				
The Body Shop	4				
Blackmores Ltd	5				