CHAPTER 8

NATIONAL APPROACH

- 8.1 Since 1988 Australian governments have prepared over 40 papers, reports and strategies relevant to waste management. One of the major strategies relevant to waste minimisation was the *National Strategy for Ecologically Sustainable Development*, which was adopted by the Council of Australian Governments in December 1992.
- 8.2 The governments have agreed to:
- develop improved means for providing support for local councils for increased recycling activity, including kerbside recycling collections, and better planning and operation of landfill sites;
- work towards introduction of pricing and charging structures which adequately reflect the full economic and environmental costs of waste disposal, while assisting funding for rehabilitation and maintenance of facilities for waste disposal; and
- develop methodologies for the evaluation and assessment of the costs and benefits of various options for waste minimisation.²
- 8.3 For this to be achieved there needs to be greater communication and cooperation between the three levels of government and the community. The Committee was told by the Local Government and Shires Associations of New South Wales that:

Unfortunately, the New South Wales State Government does not seem to have learnt even the most basic lessons regarding waste management. The Green Paper, released in late 1992, and the subsequent report of the Joint Select Committee on Waste Management in September 1993, revealed a Government which was not prepared to take a stance on issues such as compulsory compliance by industry with the agreed target of 50 per cent waste reduction by the year 2000, the enactment of legislation to force industry to comply,

¹ Environmental Management Industry Association of Australia Limited, Submission No.63, p.14.

National Strategy for Ecologically Sustainable Development, December 1992, pp.75-76.

and the imposition of container deposit legislation. Instead we have a State Government which would like industry to voluntarily comply with waste minimisation targets, even though they have not demonstrated too much commitment across the board, to date.³

8.4 The Associations went on to say that:

what is really needed is a coordinated approach managed by a central authority, and legislation which gives the State and local governments substantial legislative powers to force the community and industry to become responsible for the amount of waste they create.⁴

8.5 Greenpeace Australia saw the situation as:

if serious consideration was given to that sort of approach at all levels it would see us working with local councils, with state authorities and with state and federal governments, rather than fighting local councils, fighting state bureaucracies and departments, fighting state governments and national governments.⁵

National Waste Minimisation and Recycling Strategy

- 8.6 The National Waste Minimisation and Recycling Strategy 1992 sets a national target of 50 per cent for waste reduction by the year 2000. In order to achieve this target a number of barriers have to be overcome, including:
- · the efficiency of collection systems;
- · the instability and availability of commodity markets;
- legislation, regulations and standards that unnecessarily inhibit the use of secondary resources;
- industry attitudes to secondary resource use and consumer attitudes to purchase of recycled products;

³ Woods, Evidence, p.320-321.

⁴ Ibid, p.321.

⁵ Cartmel, Evidence, p.408.

- lack of information on appropriate technologies and practices and on the benefits and costs of particular activities;
- the plethora of government agencies that can have a bearing on recycling decisions; and
- contamination of recycled materials.⁶
- 8.7 It was appreciated by CEPA that the achievement of this target would require a number of substantial reviews and actions which are outlined in the Strategy.⁷
- 8.8 The Commonwealth's Office of Regulation Review found that many of the features breached the Government's regulation review guidelines. The following items were considered undesirable:
- it did not specify particular objectives for the proposed measures;
- there was inadequate analysis as they failed to identify forms of environmental market failure or to consider the cost benefits of the proposals;
- various forms of regulation were recommended without comparing different instruments for achieving environmental goals; and
- they contained a range of potentially inefficient 'command and control' regulations such as waste bans and arbitrary voluntary targets which, since they are accompanied by a threat of regulation if not met, qualify as de facto mandatory targets.⁸
- 8.9 Each year it was estimated that Sydney alone would need to find markets for:

Commonwealth Environment Protection Agency (1992) National Waste Minimisation and Recycling Strategy. Department of Arts, Sport, the Environment and Territories, June 1992, p.22.

⁷ Ibid, pp.22-25.

Office of Regulation Review (1993) Recent Developments in regulation and its review, November 1993, p.23.

Tonnes/Year
60 000
300 000
80 000
160 000
110 000
238 000
30 000
380 000
180 000°

8.10 Puplick and Kirk argued that:

This indicates the continuing difficulty faced when government set specific targets for recycling or waste reduction without adequate regard to the realities of the market place or the availability of technologies.¹⁰

- 8.11 Studies conducted in Sydney have shown that the average waste reduction level for all councils has been 2.4 per cent in the last 12 months. The NSW Joint Select Committee Upon Waste Management recommended that the EPA should have a timetable detailing the percentage reduction required annually to meet the 50 per cent target for the year 2000. 12
- 8.12 A major problem in determining what the targets should be and the progress towards these, was the inadequacy of data on the existing waste disposal levels in 1990. The identification and documentation of existing waste is essential for its effective management.¹³ The Industry Commission found that there had been some progress in relation to

Australian Environment Review 8(1) Nov/Dec 1993, p.17

Puplick C and Kirk A (1994) Completely Wrapped. 1994 Update. packaging, Waste management and the Australian Environment. Packaging Environment Foundation of Australia, p.67.

¹¹ Hopper, Evidence, p.418.

¹² Joint Select Committee Upon Waste Management, September 1993, New South Wales Parliament, p.10.

¹³ Thomas, Brotherton and Gillham, Submission No.17, p.1.

data collection and the improved understanding of economic instruments but that other measures in the strategy had not been progressed, such as the targets for recycling and packaging reductions.¹⁴

8.13 Another concern is the conditional nature of the targets set. The Local Government and Shires Associations of New South Wales gave the opinion that:

Unlike the National Waste Minimisation and Recycling Strategy targets that have numerous conditions, targets should unconditionally apply to industry sectors. It should be up to them to ensure they are met. 15

- 8.14 The Associations emphasised the point that the target should take account of both weight and volume; be based on total waste irrespective of population and economic changes and apply to the domestic, industry, commercial and building sectors. ¹⁶ The Friends of the Earth's Waste Minimisation Strategy also considers the target should apply to both weight and volume, to all sectors of the community and include disposal to landfill, incineration and mixed waste processing, such as neutralysis and composting. ¹⁷
- 8.15 Concern was also expressed that over time, the efforts and money currently being devoted to recycling may not be sustained, and doubt was cast on the ability to meet the 50 per cent reduction in waste by the year 2000.¹⁸
- 8.16 The Committee is also concerned about the extent the onus for achieving these targets has been given to local councils without additional resources in terms of funding or information. The ongoing

¹⁴ Industry Commission (1993) Annual Report, 1992/93, AGPS Canberra, p.264.

Local Government Association of New South Wales and Shires Association of New South Wales, A response to the Minister for the Environment's Green Paper on waste management Executive Summary, March 1993, p.v.

¹⁶ Ibid, p.iv.

¹⁷ Friends of the Earth, Submission No.48, p.9.

¹⁸ Hopper, Evidence, p.418.

process which reviews the progress towards and the expectations of these targets against the realities of the available technologies and markets should also review the resource allocations to local councils.

8.17 The National Waste Minimisation and Recycling Strategy requires CEPA to:

measure, review, monitor and report on the performance against the waste reduction and recycling targets contained in the Strategy. If monitoring shows that targets are not being reached CEPA will discuss with the States and Territories options to enforce them.¹⁹

8.18 During the course of its inquiry, the Committee became aware of a number of resource difficulties in terms of funds and information at the local government level. Accordingly, although the Committee believes that while harsh measures may be appropriate where local, State or Territory governments are not being environmentally responsible, until the issues of technology, markets and funding can be satisfactorily dealt with, the enforcement approach should not be used and a cooperative approach may be appropriate.

National Database and National Classification System

- 8.19 Because the volumes are not well documented in Australia, and the waste is widely dispersed, it is difficult to justify investment in expensive technologies on economic grounds.²⁰ Waste volumes in Australia are small by international standards, therefore most technologies have been developed overseas.²¹
- 8.20 In the development of a national classification system or database, consideration should be given to whether that material will become a scheduled waste later in its life cycle. The Independent Panel on Intractable Waste recommended that:

Commonwealth Environment Protection Agency (1992) National Waste Minimisation and Recycling Strategy. Department of Arts, Sport, the Environment and Territories, June 1992, p.28.

²⁰ Hawkes, Evidence, p.734.

²¹ Ibid, p.735.

waste management implications be considered during the assessment for registration of agricultural, veterinary and industrial chemicals and therapeutic substances.²²

8.21 The Panel recommended that all scheduled waste be destroyed by the year 2001. There will be considerable difficulty in forming a national register if enterprises consider they will need to dispose of all scheduled waste before the year 2001 against a background of no available technology, and this may be an incentive not to disclose the full amount held by companies. There is also an urgent need to clarify exactly what quantities and concentrations for various wastes need to be declared.

National Pollutant Inventory

8.22 CEPA is currently developing a National Pollutant Inventory which is designed to provide information for environmental planning, provide information to the public, to promote waste minimisation and to assist in the meeting of Australia's international commitments as well as identifying priority contaminants.²³ CEPA has issued a public discussion paper for comment and will be holding a number of workshops in developing the national inventory.

8.23 The *Inventory* will collate information on the release of chemicals into the environment, which will provide information to the community and assist the formulation of policy and decision making.²⁴ Commonwealth legislation is being considered which would require mandatory industry reporting.²⁵

²² Independent Panel on Intractable Waste 1992 A Cleaner Australia, Volume 1 Findings and Recommendations, 6 November 1992, p.14.

²³ Commonwealth Environment Protection Agency (1994) National Pollutant Inventory, Public Discussion Paper, February 1994.

²⁴ Environment Management, National Affairs, August 1994, p.2.

²⁵ Ibid, p.3.

Legislation

8.24 The EMIAA Limited listed 38 Acts in Australia which related to waste disposal but commented that these were not being uniformly or effectively enforced.²⁶ The Committee was told that approval should not be given for projects if the authorities could not monitor or police them.²⁷

8.25 The paper prepared for the Prime Minister's Science Council in 1991 recommended that:

The Federal and State Governments should cooperate in the establishment of appropriate national standards for waste disposal. Coupled with these standards, the encouraging moves by the public sector authorities to quantify and report on the economic performance of their waste treatment operations should be strengthened and financial goals set.²⁸

8.26 The United States EPA has an overall regulatory role and its decisions on processes are usually accepted by the States.²⁹ In Australia a number of regulatory approvals would be necessary to operate nationally.

8.27 Australian National Industries believed that the first thing Australia needed to do was to formulate rules and regulations so that there was a known framework.³⁰ Regulations outlining the required standards to be achieved should be available before adequate management plans could be developed.

Environmental Management Industry Association of Australia Limited, Submission No.63, p.13.

²⁷ Ellis, Evidence, p.582.

Prime Minister's Science Council (1991) Commercial Opportunities in Waste Management. Papers prepared for the fourth meeting of the Prime Minister's Science Council, 20 May 1991, Office of the Chief Scientists, AGPS Canberra, p.23.

²⁹ Cloete, Evidence, p.563.

³⁰ Gutteridge, Evidence, p.307.

- 8.28 These standards should be determined in accordance with the appropriate risk and benefit/cost information and should not require performance at levels above those necessary to protect health and the environment.³¹ The increases in the emission control standards of recent decades are considered by the Packaging Council of Australia Inc to be consistent with the highest health policy and environmental requirements.³²
- 8.29 An effective legislative framework would enable the various stakeholders to conduct their businesses in a more certain environment.³³ ICIA told the Committee that there were no ground rules and the company would be foolish to accept a technology before there were some rules.³⁴
- 8.30 Regulations may also be necessary in circumstances where the full social and environmental impacts are not reflected in the costs.³⁵ Mr Bridle told the Committee that there was no immediate pressure on utilities to find a solution because the material was well contained in storage facilities.³⁶ A legislative approach would ensure that waste reduction strategies were based on unconditional targets.³⁷
- 8.31 The view was expressed that legislation was needed to put pressure on waste holders (companies, universities and government bodies) to dispose of waste, but the Commonwealth has little power in this area. The Committee was told that regulations imposed by EPAs

³¹ ICI Chemicals and Plastics, Response to Draft Protocols on Accreditation, Trials and Management Plans of the Scheduled Waste Working Group, 15 April 1993, p.2.

³² Packaging Council of Australia Inc, Submission No.56, p.1.

³³ SRL PLASMA Limited, Submission No.20, p.11.

³⁴ Stephens, Evidence, p.730.

³⁵ Friends of the Earth, Submission No.48, p.9.

³⁶ Bridle, Evidence, p.125.

³⁷ Local Government Association of NSW and Shires Association of NSW (1993) A response to the Minister for the Environment's Green Paper on waste management. Executive Summary, March 1993, p.i.

have been much more effective than voluntary reduction in industrial waste.³⁸

8.32 It was argued that:

Industry will consider end-use only if they are required to retain responsibility for products and packaging over the entire life-cycle.³⁹

- 8.33 Legislation can be used to ensure that the responsibility for waste is apportioned in an equitable way and that the environmental impact is minimised.⁴⁰ There needs to be a 'closed-loop' approach by industry to products and packaging.⁴¹
- 8.34 The Victorian Government's *Industrial Waste Strategy* includes the principle that the waste producer should be responsible for the generation, storage, transport, treatment and disposal of waste from its operations.⁴² The policy also enables the EPA to require a waste audit or waste management plan as part of a works approval application or a pollution abatement notice.⁴³
- 8.35 The Local Government and Shires Associations of New South Wales considered that legislation requiring refundable deposits on containers and packaging would make the responsibility for the collection, reuse, recycling and disposal of products and packaging rest with industry.⁴⁴

³⁸ Toxic Chemicals Committee, Total Environment Centre Inc, Submission No.36, p.10.

³⁹ Friends of the Earth, Submission No.48, p.11.

⁴⁰ Friends of the Earth, Submission No.48, p.10.

⁴¹ Local Government Association of NSW and Shires Association of NSW (1993) A response to the Minister for the Environment's Green Paper on waste management. Executive Summary, March 1993, p.i.

⁴² Victorian Government, Submission No.83, Attachment A, p.3.

⁴³ Victorian Government, Submission No.83, Attachment A, p.4.

Local Government Association of NSW and Shires Association of NSW (1993) A response to the Minister for the Environment's Green Paper on waste

8.36 The Local Government Association and the Nature Conservation Council of New South Wales have developed a legislative package for waste reduction which includes:

legislation requiring industry to take life cycle responsibility for their products and packaging; legislation which gives consumers and manufacturers a financial incentive to return for reuse or recycling a wide range of products and packaging; legislation requiring manufacturers of products and packaging to assess and disclose full details of the life cycle of such items; legislation requiring all sectors of the community, including manufacturers, retailers, consumers and governments to meet compliance targets for products re-use and materials recycling; legislation to prohibit the most wasteful and hazardous products and materials from sale.⁴⁵

- 8.37 Industry and councils need to consider what future impact legislative constraints will have on the costs of waste disposal options. A national approach would overcome the disincentives for industries to be domiciled within each State.⁴⁶
- 8.38 The other view is that consumers have some responsibility through using the products which create waste somewhere along the production chain.⁴⁷ Any proposed legislation must ensure that responsibilities are equitably shared.
- 8.39 Another factor to be considered is that increasing the standards for the disposal of waste increases the differential in cost between legal and illegal methods of disposal. The cost to society of illicit dumping of waste is much higher than the costs of legitimate waste disposal. It may be cheaper to ship waste across borders, such as the medical wastes in Sydney being transferred to Brisbane, rather than disposing of it near to the site of waste production.

management. Executive Summary, March 1993, p.i.

⁴⁵ Woods, Evidence, p.324.

⁴⁶ Ibid, p.325.

⁴⁷ Independent Panel on Intractable Waste (1992) A Cleaner Australia. Volume 2 Assessment of the Management Options, 6 November 1992, p.10.

⁴⁸ Ibid, pp. 5-7, p.5.

8.40 It is a matter of finding the right incentives and monitoring the impact. There are difficulties in determining this impact, and this would require considerable information on the origins and destination of waste material.⁴⁹

8.41 Community education could be improved by a national cooperative approach. One example given to the Committee was the approach by a local city council which still did not wish to consider all alternatives to the burning of green waste. The Committee was alarmed to learn that a local council did not know about a number of alternatives that are now being used by other councils. Another example was the Picton sewage works, which will discharge into the local river during maximum flow periods.⁵⁰

Uniform National Standards

8.42 There was considerable industry support for the establishment of a national agreed set of guidelines. The Committee was told that the same emission standards should apply across all industries and for government organisations, and there should be comprehensive legislation and restrictions on handling, collection, use and disposal of waste. There should be a prohibition on dumping of harmful wastes and governments should take a coordinating role in relation to continuity of supply to larger waste disposal outlets.⁵¹

8.43 If environmental standards were developed, then industries would know the required standards when developing new projects. If these standards were developed nationally, then the existing industries would be required to meet same standards nationally.

8.44 Australian National Industries considered that:

⁴⁹ 'Waste and the Environment A Lasting Reminder' *The Economist* May 29th 1993, pp.5-7, p.5.

⁵⁰ Kiernan, Evidence, p.265

⁵¹ Benkendorff, Evidence, p.434.

Manufacturing industry in this country is living with the uncertainty of varying Federal and State requirements (often in the form of 'understood' standards). The clear indication from elsewhere (Europe in particular) is rational, achievable, environmental standards, applied over a well defined and sensible timetable benefit industry. It allows industry to plan effectively and achieve economically acceptable progress, whilst at the same time environmental engineers can build an industry (and service) which has substantial export potential, even after the delayed start we have inflicted on ourselves and Australians. ⁵²

- 8.45 The Committee was told that Australia lacked a common policy on waste management and legislative measures for the control of emissions from recycling to energy recovery plants.⁵³ The introduction of uniform or bilateral legislation on emission standards for incinerators should be given priority.⁵⁴
- 8.46 The Committee was given the example that emission standards for total solid particulates from incinerators in New South Wales was 250 milligrams, in Victoria it was 70, while Queensland, Tasmania and Western Australia did not have set standards but tended adopt the standards of other EPAs.⁵⁵
- 8.47 Dalite Holdings considered that it was essential that governmental standards be established so that engineers had specific design goals.⁵⁶ The Waverley and Woollahra Councils were of the view that:

the most inhibiting measures affecting waste management in Australia relate to the lack of national standards for material handling on an equitable basis, and the cost of landfill not reflecting true disposal

⁵² Australian National Industries Ltd, Submission No.27, p.7.

⁵³ CEDEC Pty Ltd, Submission No.9, p.3.

⁵⁴ Bartlett, Evidence, p.454.

⁵⁵ Bartlett, Evidence, p.459-460.

Dalite Holdings Pty Inc, 'The Use of Incineration as a Means of Disposal of Waste and Energy Recovery'. Submission prepared by Hetzler F and Koenig R, Submission No.15, p.3.

costs, which will force future generations to fund a legacy of current waste disposal neglect.⁵⁷

8.48 There should be legislation covering the transport of hospital waste similar to the Act that prohibits the transfer of liquid waste over borders.⁵⁸ The was also some support for third party prosecution rights.⁵⁹

8.49 The Committee urges the urgent attention of all governments to participate in the development and implementation of nationally agreed standards. The implementation of these standards would rely on the willingness of the States to enforce them . It is therefore essential that the development of a national standard to be determined by the States and Territories through agreement. This approach would also ensure that practical matters were addressed in the formulation of the standards.

National Accreditation

8.50 In developing a national accreditation system it is essential that the process is not excessively bureaucratic and should not duplicate approval steps at the Commonwealth and State levels, as this can act as a disincentive to industry. The accreditation process must not introduce excessive delays, and industries should know the costs of gaining accreditation. ICIA pointed out that it was in the interest of all parties to have an accreditation process that was cost effective and simple to administer. Exception of the control of the cost of the cost

⁵⁷ Waverley and Woollahra Councils, Submission No.61, p.5.

⁵⁸ Ellis, Evidence, p.577.

⁵⁹ Hutton, Evidence, p.587.

⁶⁰ ICI Chemicals and Plastics, Response to Draft Protocols on Accreditation, Trials and Management Plans of the Scheduled Waste Working Group, 15 April 1993, p.1.

⁶¹ Ibid, p.2.

⁶² Ibid, p.2.

8.51 A national approach may be beneficial in instances when the authority to act is unclear. For example, the Committee was told that the NSW EPA is not prepared to declare a site suitable for other purposes after the site has been decontaminated. Local authorities who give permission to re-use the land may be subject to common-law action. The Local Government and Shires of NSW Associations considered that it was more appropriate that the EPA have responsibility because of the lack of expertise by local government.

8.52 There is a need to ensure that adequate environmental safeguards are in place through consultation with other councils en route before permission is given for the establishment of a waste disposal/treatment facility. A national approach would assist.

Central Facility Compared with Treatment on Site

8.53 The Independent Panel on Intractable Waste recommended that:

a single, central, fixed waste disposal facility to treat all of Australia's intractable waste not be established.⁶⁷

This recommendation is supported by this Committee. One of the major outcomes of the work of the Panel was to:

define the solution in terms of small, specific, localised and, often relocatable facilities able to deal with various types of intractable waste at or near source according to the particular properties and characteristics of the waste.⁶⁸

⁶³ Woods, Evidence, p.334.

⁶⁴ Ibid, p.334.

⁶⁵ Ibid, p.335.

Local Government Association of New South Wales and Shire Association of New South Wales, Submission No.57, p.1.

⁶⁷ Independent Panel on Intractable Waste (1992) A Cleaner Australia, Volume 1 Findings and Recommendations, 6 November 1992, p.35.

⁶⁸ Ibid, p.4.

8.54 The construction of a central facility must take into consideration the costs of safe storage and transport of waste, and adequate emission and residue standards.⁶⁹ In 1991, ICI Australia were of the opinion that there were severe disadvantages in construction of a single large scale, multi-purpose high temperature incinerator, and that this would be uneconomic.⁷⁰

- 8.55 The disadvantage of a centralised facility is that people are able to transport their waste to that site, and this removes some of the responsibility and the disincentive to stop producing that material if they had to dispose of it themselves.
- 8.56 The treatment of waste on the site where it is produced avoids the risks of transport but must be safe, accepted to be safe and outputs must be free from toxic contaminants.⁷¹ The view was given that the transportation of any type of hazardous waste should be over a minimal distance.⁷²
- 8.57 Uniform standards should be applied in the case of mobile process units, which will be able to move between States to treat contaminated materials at site.
- 8.58 The Committee was told that many surveys have shown a public acceptance of the view that waste problems should be dealt with locally. The Australian Conservation Foundation pointed that there are significant problems with monitoring mobile facilities where a centralised facility can be monitored by the community and interest groups as well as by the authorities. The community and interest groups are well as by the authorities.

⁶⁹ Carter & Ogilvie Research Pty Ltd, Submission No.19, p.2.

⁷⁰ ICI Australia Submission to the Independent Panel on Intractable Wastes, November 1991, p.7.

⁷¹ Carter & Ogilvie Research Pty Ltd, Submission 19, p.3.

⁷² Ellis, Evidence, p.577.

⁷³ Toxic Chemicals Committee, Total Environment Centre Inc, Submission No.36, p.8.

⁷⁴ Brotherton, Evidence, p.704.

Public Acceptance

8.59 Dalite Holdings emphasised the necessity of being able to convince the community openly and honestly of the benefits of a project. Failure to do so could mean the failure of the project. They considered that these discussions required national, centrally established environmental goals. 76

8.60 The Committee was told that:

Councils and private developers are engaging in building waste transfer stations amongst residential areas. This has led to a public outcry with development applications now before the courts.⁷⁷

8.61 Dalite Holdings suggested that a task force consisting of governmental authorities and environmental experts from universities, institutions and industry could provide a credible body that would be more acceptable to the community.⁷⁸ They also considered that:

Prior to the issuance of guidelines and standards, it is important to allow the public to intervene with questions and requests for clarification to allow an open public feeling of participation in the decision making process.⁷⁹

Dalite Holdings Pty Inc, 'The Use of Incineration as a Means of Disposal of Waste and Energy Recovery'. Submission prepared by Hetzler F and Koenig R, Submission No.15, p.2.

⁷⁶ Ibid, p.2.

⁷⁷ Meschino, Submission No.65, p.1

Dalite Holdings Pty Inc, "The Use of Incineration as a Means of Disposal of Waste and Energy Recovery'. Submission prepared by Hetzler F and Koenig R, Submission No.15, p.2.

⁷⁹ Ibid, p.2.

Financial Issues

8.62 It was suggested to the Committee that one of the roles of governments was to provide financial assistance to innovative technologies.⁸⁰ The Committee was told that if local governments benefit from reduced landfill, the community should be required to contribute to the development of promising technologies.

8.63 The view was put to the Committee that some form of tax relief should exist for the remediation of contaminated sites because there is community benefit in the return of the sites to public use. 81 The Committee is concerned, however, that this approach might encourage industries to allow the contamination of sites knowing that the tax payers will pay for the remediation of the sites afterwards. Accordingly the Committee does not support this approach. In cases where contamination has already occurred and the enterprises complied with the existing environmental standards, then these should be considered on a case by case basis.

8.64 The Independent Panel on Intractable Waste recommended that:

an Environmental Remediation Bank be set up to provide repayable loans over a ten-year period to allow companies to clean sites under conditions of affordable liability.⁸²

8.65 It was suggested that dollar for dollar government assistance would provide incentives for the commercialisation of innovative projects, which not only would assist the Australian community but would also provide valuable export dollars.⁸³ The PLASCON process has cost an estimated \$7 million to date.⁸⁴

⁸⁰ Illawarra Technology Corporation Ltd, Submission No.22, p.14.

⁸¹ Mainwaring, Evidence, p.764.

⁸² Independent Panel on Intractable Waste (1992) A Cleaner Australia, Volume 1 Findings and Recommendations, 6 November 1992, p.36.

⁸³ Illawarra Technology Corporation Ltd, Submission No.22, p.14.

⁸⁴ SRL PLASMA Limited, Submission No.20, p.5.

8.66 It was also suggested that governments should make available resources to enable community groups to investigate risk assessment and environmental and health-related impacts of proposals, such as municipal incinerators. Community groups consider that they were at a disadvantage compared with the resources that could be utilised by proponents of projects such as incinerators. Any resources available should be accessible by groups both supporting or opposing the establishment of waste disposal facilities.

8.67 The Independent Panel on Intractable Wastes identified 12 areas that may require public expenditure, ⁸⁷ which would will be considered by the relevant agencies when appropriate.

National Initiatives

8.68 A number of initiatives have been undertaken in Europe and are worthy of consideration in the Australian context. Australian National Industries Ltd have listed the following:

- · No new landfills in Germany;
- Packaging directives:
 60% packing materials to be recycled
 30% to be used for energy
 10% to landfill;
- Manufacturers responsible to ensure packaging is recycled and reused. 'Greenpoint system';
- Avoidance of packaging, take back at the point of sale;
- No putrescible waste;

⁸⁵ Zetland Community Action Group, Submission No.28, p.D.

⁸⁶ Ibid, p.D.

⁸⁷ Independent Panel on Intractable Waste (1992) A Cleaner Australia, Volume 1 Findings and Recommendations, 6 November 1992, p.34.

- Incentives for private power generation from non-fossil fuels
 (2 x buyback tariff);
- Landfill levies (Sweden); and
- Legislation is directed at 'polluter pays'.⁸⁸

8.69 A number of suggested initiatives for governments were:

- legislation to increase the rate of introduction of polluter pays systems;
- incentives to buy back the power generated from non-fossil fuel;
- increased levies on landfill to reflect the costs of disposal;
 and
- promotion of waste to energy as an extension of recycling.⁸⁹

Role of Government

8.70 The Committee received a number of suggestions in relation to the role of governments. For example, Waste Services New South Wales suggested that, apart from financial support, the support of governments was required in the siting of relocatable facilities for the treatment of wastes, and there should be a commitment to the progressive destruction of scheduled wastes.⁹⁰

8.71 It was suggested to the Committee that governments:

⁸⁸ Australian National Industries Ltd, Submission No.27, p.30.

⁸⁹ Ibid, p.37.

⁹⁰ Waste Service NSW, Submission No.68, p.3.

must own and control the means of ultimate disposal, otherwise it loses its most effective tool of stimulating and regulating waste avoidance and reduction schemes.⁹¹

8.72 The difficulties of relocating a disposal technology required finding of a site, locating stored waste, getting approvals, and repeating investigations previously done in other places, all of which reduced the commercial attractiveness. ⁹² State governments could assist by assigning a place where these operations should be conducted, instead of private industry having to find it. ⁹³ One of the advantages of relocatable units is that Australia is not producing intractable wastes, so there is only the task of cleaning up a backlog. ⁹⁴ Further, a lot of waste was in too small a quantity to justify the travel and set up costs. ⁹⁵

8.73 Government business enterprises provided 90 per cent of the capital outlay in 1991-92 on environmental products and services and are one of the main purchasers of waste management technologies. ⁹⁶ The Industry Commission, however, found that the tendency was for government agencies to purchase proven technologies with the lowest up front cost, and not the system with the lowest life cycle cost. ⁹⁷ The Department of Environment, Sport and Territories pointed out that:

Some Government tenders specify exactly the technologies or services required, thus precluding new technologies or systems that can perform the same task with the desired result in a different way. These

Toxic Chemicals Committee, Total Environment Centre Inc, Submission No.36, p.10.

⁹² Krynen, Evidence, p.605.

⁹³ Ibid, p.605.

⁹⁴ Ibid, p.607.

⁹⁵ Ibid, p.605.

⁹⁶ Department of Environment, Sport and Territories, Supplementary Submission No.69, p.4.

⁹⁷ Ibid, pp.4-5.

issues tend to be a barrier to the commercialisation of new technologies.⁹⁸

- 8.74 It was suggested that government agencies should be required to purchase low waste products, with the possible introduction of a defined percentage of the budget to be spent them. 99 Governments could also consider procurement legislation based on consumption reduction, product reuse and materials recycling. 100
- 8.75 The Local Government and Shires Associations of New South Wales suggested that all government agencies over a specified size should be required to conduct environmental audits, which should include the use of recycled products. ¹⁰¹ The Associations considered that particular attention should be given to education and promotion of recycled products to government departments. ¹⁰²

8.76 The Associations went on to point out that:

It is unfortunate that the promotion of recycling to local government and the community has been performed by industry groups such as the Litter Recycling and Research Association and Recycle Sydney/Recycle NSW and not the State Government. While it is acknowledged that these groups have supported recycling in NSW, the message they provide is naturally consistent with the interests of the industries they represent. Particular attention should be given to industry bodies that have provided little, if any, support for waste minimisation promotion and education. 103

⁹⁸ Ibid, p.5.

⁹⁹ Friends of the Earth, Submission No.48, p.11.

Denlay J (1993) 'Waste minimisation - the sustainable option' Incineration an option for waste management. Proceedings of a seminar on incineration of domestic waste, Commonwealth Environment Protection Agency. Pavillion Hotel, Canberra, 30 November 1993, p.46.

Local Government Association of New South Wales and Shires Association of New South Wales, A response to the Minister for the Environment's Green Paper on waste management, Executive Summary, March 1993, p.viii.

¹⁰² Ibid, p.ix.

¹⁰³ Ibid, p.ix.

8.77 Concern was expressed about the inadequate government action in providing the community with the facts about waste disposal to correct the public perceptions based on myth. ¹⁰⁴ The Association of Liquidpaperboard Carton Manufacturers Inc urged that:

governments at all levels be encouraged to acquaint the public of true relative merits of all waste management options to help avoid policy distortions brought about by the need to cater for public misconceptions. ¹⁰⁶

8.78 The Association also told the Committee that it was also important that governments considered a range of waste management options to optimise the environmental and economic impacts. ¹⁰⁶ To ensure this, further information needed to be collected on the factors inhibiting the expansion and effectiveness of recycling programs and on what strategies were needed to implement better schemes. ¹⁰⁷

8.79 The Committee urges government authorities responsible for policy development in relation to these matters take these comments into consideration when developing strategies for future directions.

Local Government

8.80 The Committee was concerned at the lack of knowledge of a number of local councils about the alternative waste management options and the national and State policies that they were required to implement. A number of studies have found that, in general, there is a lack of information exchange between local government and the other two levels of government. The Western Australian Government has been looking at the sharing of information between metropolitan and

Association of Liquidpaperboard Carton Manufacturers Inc, Submission No.60, p.15.

¹⁰⁵ Ibid, p.15.

¹⁰⁶ Ibid, p.15.

¹⁰⁷ Ibid, p.15.

country areas which do not have the same level of expertise and resources. 108

8.81 A number of studies have found that environmental information resources of local government are inadequate and that there is a gap between research science and policy making at that level. The barriers to local government implementing environmental policy include:

- poorly developed policy frameworks;
- fragmented, out of date and ineffective regulatory systems;
- lack of resources and skills at local government level;
- constraints of a market based property development system on which local government income depends; and
- a multiplicity of State and local approvals systems with contradictory requirements.¹¹⁰
- 8.82 A survey by the University of New South Wales found that of the local government planners who considered themselves well informed, only one third were aware of State government reports, and less than a quarter were familiar with Commonwealth government information.¹¹¹
- 8.83 A study by the University of Western Australia found that most local government staff considered their information sources to be

¹⁰⁸ Howlett, Evidence, p.141.

Brown V, Orr L and Ingle Smith D (1992) Acting Locally Meeting the environmental information needs of local government. Centre for resource and Environmental Studies, October 1992, p.11.

¹¹⁰ TASQUE (1992) The Role of Local Government in Environmental Management, Local Government Minister's Council.

Brown V, Orr L and Smith D (1992) Acting Locally Meeting the environmental information needs of local government. Centre for Resource and Environmental Studies, October 1992, p.11-12.

inadequate and acquired their information from personal contacts and used documentary sources rarely.¹¹² Technical information on household waste was considered to be more available than other types of environmental information.¹¹³

8.84 A survey by the Centre for Resource and Environmental Studies found that household waste was the issue of most concern to local government staff, and the major problems were perceived to be:

- new sites: lack of new sites, need for regional cooperation and transfer stations;
- old sites: landfill problems, reclamation, contaminated sites, changes in local collection, kerbside pickup;
- waste minimsation: recycling, reusing, education, creating markets for recycling building materials;
- · sewage: recycling, treatment and disposal; and
- disposal techniques: too much rubbish, household chemical disposal, illegal domestic waste, cost of disposal, impacts on environment.

8.85 The survey also found that the administration, elected member, engineer, environment and health departments all listed household waste and sewage as the number one priority. This survey found that Victoria, South Australia, Tasmania, Western Australia and the Northern Territory local governments all rated household waste and sewage as the number one priority among environment issues while Queensland rated it third and New South Wales rated it fourth. 116

¹¹² Ibid, p.12.

¹¹³ Ibid, p.61.

¹¹⁴ Ibid, p.21.

¹¹⁵ Ibid, p.34.

¹¹⁶ Ibid, p.38-39.

8.86 Local government is generally responsible for the operational aspects of waste management, while the monitoring, regulatory and enforcement matters are the responsibility of the State. The Committee was told that local governments are in a difficult position because they had the responsibility for waste disposal without the legislative powers to control the generation of waste or the absolute powers to control its disposal of waste. 117

8.87 Victoria and some of the other States, are now moving away from the 'command and control' mechanisms of the 1970s towards a more cooperative approach that 'recognises, encourages and rewards people for improved environmental performance'. One of the major priorities in the recent legislation introduced in South Australia was a cooperative working agreement with local government. 119

8.88 Local councils are increasingly cooperating on a regional basis to provide more flexible and efficient approaches to waste management.¹²⁰ A survey of local government staff identified a need for more integrated and cooperative approaches, both within local government and between councils within a region.¹²¹ This has resulted in more uniform performance, fee structures and recycling services.¹²²

8.89 The Committee was urged to ensure that the role of local government was appreciated in such matters as representation on the

Woods, Evidence, p.322.

Puplick C and Kirk A (1994) Completely Wrapped 1994 Update Packaging, Waste Management and the Australian Environment. Packaging Environment Foundation of Australia, p.56.

¹¹⁹ Ibid, p.60.

¹²⁰ Victorian Government, Submission No.83, Attachment A, p.3.

Brown V, Orr L and Smith D (1992) Acting Locally Meeting the environmental information needs of local government. Centre for Resource and Environmental Studies, October 1992, p.47.

Joint Select Committee Upon Waste Management, September 1993, NSW Parliament, p.3.

National Advisory Body proposed by the Scheduled Wastes Working Group. 123

- 8.90 EMIAA considered that the role of local government should include: the introduction of economic incentives to reduce waste, charging the full cost of disposal, providing recycling stations at all landfills and monitoring amounts of waste. 124
- 8.91 The Local Government and Shires Associations of New South Wales expressed the view that:

For too long local government and the community have accepted responsibility for the disposal of wastes created by industry. It is time industry took greater responsibility and Federal and State Governments introduced legislative controls and fiscal policies to the betterment of waste management and minimisation. 125

State Government

8.92 The NSW Joint Select Committee Upon Waste Management concluded that, as the State Government signed the agreement to reduce waste by 50 per cent by the year 2000, it should have primary responsibility for developing and promoting waste minimisation policies. It was suggested that, in particular, there should be a strong government involvement in post-consumer material market creation. 126

8.93 The Victorian Government saw its role in relation to waste management as:

¹²³ Municipal Waste Advisory Committee, Western Australian Municipal Association, Submission No.37, p.1.

Environmental management Industry Association of Australia Limited, Submission No.63, p.5.

Local Government Association of NSW and Shires Association of NSW (1993) A response to the Minister for the Environment's Green Paper on waste management. Executive Summary, March 1993, p.i.

¹²⁶ Ibid, p.i.

providing a cost-effective, comprehensive regulatory system, enforcing the components of this system and encouraging and facilitating the adoption by industry of cleaner production/waste minimisation practices and technologies, with the private commercial sector providing the necessary waste treatment and disposal facilities. 127

8.94 The Queensland Government provided BCD Technologies with assistance in the form of a subsidy on business planning, scientific officers for auditing and the funding of independent testing of the byproducts. BCD Technologies, however, drew the Committee's attention to the US EPA SITE (Superfund Innovative Technology Evaluation) model which encouraged private industry to demonstrate their processes on stored waste or at contaminated sites. The US EPA provided the waste, permits and independent analysis, while the contractors provided the equipment, reagents and operated the plant at their own expense. 130

8.95 In contrast, the usual approach in Australia is for the contractor to find the site and waste, gain the approvals, do the EIS and await approval. ICIA considered that their site could be used as a demonstration plant for a particular technology. This technology would have to achieve community acceptance, have proven environmental performance in respect to emissions, effluents and solid waste, and be cost effective. The facility could be relocated elsewhere after the disposal of the wastes at the Botany site. The site of the contractor to find the

8.96 ICIA pointed out that:

¹²⁷ Victorian Government, Submission No.83, Attachment A, p.1.

¹²⁸ BCD Technologies, Submission No.50, p.v.

¹²⁹ Ibid, p.v.

¹³⁰ Ibid, p.v.

¹³¹ Ibid, p.vi.

¹³² ICI Australia Operations Pty Ltd, Submission No. 55, p.4.

¹³³ Ibid, p.6.

¹³⁴ Ibid, p.15.

since it is the sole owner of HCB waste and this waste is stored in a single location on ICIA Botany Site in New South Wales, then ICIA should be able to work with the New South Wales EPA and the New South Wales Department of Planning using existing approval procedures (including the EIS process) in selecting, gaining accreditation for and operating a disposal facility for the HCB waste. 135

8.97 One example of cooperation between government and industry was the trials in the destruction of PCBs using the PLASCON process which were also conducted on transformers supplied by the State Electricity Commission of Victoria. The Committee commends the cooperation of the State Electricity Commission of Victoria in supplying the transformers. The Committee was told of other processes which were unable to obtain materials to work with. 137

8.98 In their response to the draft protocols on accreditation trials and management plans of the Scheduled Waste Working Group, ICIA expressed their concern that the overall approval system should not be duplicated, so that accreditation with ANZECC should not require a similar review by New South Wales.¹³⁸

8.99 The Local Governments and Shires Associations of New South Wales suggested to the State Government that a coordinated approach was needed to provide a uniform approach to waste management. They suggested a State-wide authority which had representatives from local government, the environment movement and industry, and which

¹³⁵ Ibid, p.16.

¹³⁶ CSIRO Division of Manufacturing technology, Submission No.10, p.12.

¹³⁷ McCormick, Evidence, p.171.

¹³⁸ ICI Chemicals and Plastics (1993) Response to Draft Protocols on Accreditation, Trials and Management Plans, 15 April 1993, p.1.

Local Government Association of New South Wales and Shires Association of New South Wales A response to the Minister for the Environment's Green Paper on Waste Management Executive Summary, March 1993, p.ii.

could develop a waste minimisation strategy, undertake research and set charges for waste disposal. 140

8.100 EMIAA recommended that:

Governments give their respective environmental agencies mandates and resources to demand and enforce higher standards of practice for waste management operations. 141

8.101 New South Wales is currently reviewing the existing arrangements. Proposed changes will include the listing of incinerators and landfills as 'designated developments' subject to approval under the *Environment Planning and Assessment Act*; the development of new standards; a review of pricing and the lodgement of bonds, development of a strategy for green wastes; and consultation with the communities on waste management issues.¹⁴²

Role of Industry

8.102 Community groups and governments considered that industry should be expected to take greater responsibility for waste management. For example, it was suggested to the Committee that where specialised equipment was needed for the recycling or reuse of materials, this should be financed by industry. Advanced disposal fees could be charged for durable and bulky items. This fee would encourage industry to design products which were recyclable. 144

8.103 The role of enterprises includes the reduction in excessive production and packaging, and taking responsibility for and paying the

¹⁴⁰ Ibid, p.ii.

¹⁴¹ Environmental Management Industry Association of Australia limited, Submission No.63, p.5.

¹⁴² Environment Management, State News, New South Wales, August 1994, p.7.

Local Government Association of NSW and Shires Association of NSW, A Response to the Minister for the Environment's Green Paper on waste management, Executive Summary, March 1993, p.vi.

¹⁴⁴ Ibid, p.vi.

costs of disposal of their products.¹⁴⁵ Other factors over which industry has influence are transportation and distribution methods, durability, repairability and recyclability of products.¹⁴⁶ There can be benefits to manufacturers whose products are seen as 'green'.¹⁴⁷

8.104 There have been a number of industry initiatives, and credit should be given to those. The Australian Water and Wastewater Association and the Waste Management Association of Australia organised two conventions relating to waste management. The 1st National Hazardous and Solid Waste Convention was held at Darling Harbour in March-April 1992. The 2nd National Hazardous and Solid Waste Convention and Trade Exhibition was held in Melbourne, in May 1994. These conventions provided information on the state-of-the-art technologies and practices, and included site visits and workshops. Avcare have developed a container management strategy, and sent a series of information bulletins to all local government councils in Australia. 150

Role of the Community

8.105 EIMAA suggested that individuals could reduce their consumption, and reuse, recycle and compost food wastes at home. 151

Environmental Management Industry Association of Australia Limited, Submission No.63, p.5.

¹⁴⁶ Department of Environment, Sport and Territories, Submission No.69,p.17.

¹⁴⁷ Ibid, p.17.

^{148 1}st National Hazardous and Solid Waste Convention, Waste Minimisation Meeting the Challenge, Darling Harbour, Sydney 29 March- 2 April 1992.

¹⁴⁹ 2nd National Hazardous & Solid Waste Convention and Trade Exhibition (1994) Waste Management Achievements and Challenges. World Congress Centre, Melbourne Victoria, 8-12 May 1994.

¹⁵⁰ McGuffog, Evidence, p.555.

Environmental Management Industry Association of Australia Limited, Submission No.63, p.5.

The community can also exert its influence through choosing products with minimal packaging and those which are more durable. 152

8.106 The community can also participate in collection programs. In Western Australia, the one-off poison collection days had been found to have limited success, and the move was to a more consistent and coordinated approach of public education and drop-off centres. 153

8.107 One example was the September 1992 Health and Pharmaceutical Education Strategy, which was designed to improve community understanding of the role of medicines in health, and part of this program was the correct disposal of medicines. This would provide information on the amount of medicine discarded, the reasons for discarding medicines and data on which types were being discarded.

Concluding Comments

8.108 It was suggested by EMIAA that the waste debate had been hijacked by vested interest groups who did not have a holistic approach. Part of the role of government was to be informed, proactive and to lead the debate to ensure that waste management was addressed in a holistic manner. 167

8.109 There is an urgent need for State and Commonwealth government agencies to ensure that their message is received by local government instrumentalities. The Committee found that there was a great deal of confusion at the local government level as to what was

¹⁵² Department of Environment, Sport and Territories, Submission No.69,p.17.

¹⁵³ Davies, Evidence, p.102.

Department of Health, Housing, Local Government and Community Services, Submission No.79. p.2.

Department of Health, Housing, Local Government and Community Services, Submission No.79, Appendix 1, p.3.

Environmental Management Industry Association of Australia Limited, Submission No.63, p.13.

¹⁵⁷ Ibid, p.13.

required to implement policies developed at the national level. Local councils were often unaware of documentation circulated by Commonwealth and State governments.

8.110 The Committee would like to see more contact between the Commonwealth Government agencies and local government instrumentalities. Forums such as the incineration seminar hosted by CEPA in Canberra may be appropriate for other capital cities. The Australia Centre for Cleaner Production has held seminars in other capital cities which were appreciated.

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