Australian Government

Department of the Environment, Water, Heritage and the Arts

Committee Secretary
Senate Standing Committee on Environment, Communications and the Arts
Department of the Senate
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Sir/Madam

Please find attached the Department of the Environment, Water, Heritage and the Arts' submission to the Senate Inquiry into the Management of Australia's Waste Streams.

Yours sincerely

Mary Harwood
First Assistant Secretary
Environment Quality Division

30 May 2008

Department of the Environment, Water, Heritage and the Arts submission to the Senate Inquiry into the Management of Australia's Waste Streams

INTRODUCTORY COMMENTS

The Department of the Environment, Water, Heritage and the Arts (DEWHA) welcomes the opportunity to present a submission to the Senate Environment, Communications and the Arts Inquiry into the Management of Australia's Waste Streams.

Waste generation and disposal can have significant environmental impacts. These include emissions to air, land and water (including greenhouse gas emissions) at various stages in the life cycle of products and materials, from extraction of raw materials to processing, marketing, transport and consumption, as well as the direct impacts associated with disposal. Although regulation has in recent decades addressed many concerns associated with the collection and disposal of waste, the impacts of waste remains an important environmental issue for Australia because of potential greenhouse and water impacts, resource conservation concerns, inappropriate disposal (e.g. through dumping and littering along with associated environmental and health impacts) and disposal in landfill facilities which do not meet best practice principles. Moreover, community expectations in relation to waste management and recycling have grown in recent years. The changing nature of the waste stream, the need to consider emerging recovery, disposal and treatment technologies, and evolving community expectations present challenges for future policy on waste management.

The Australian Government has limited powers under the Constitution to engage directly in waste management issues. Responsibility rests largely with state, territory and local governments. The role of the Australian Government in waste management has evolved in recent years however, and DEWHA is now increasingly engaged in waste policy development, with a particular focus on developing harmonised national approaches for significant waste issues. A key driver for the department is to encourage consistent policies which provide cost effective, fit-for-purpose solutions and do not adversely affect national markets for either products or recovered resources. DEWHA is also involved in waste policy related to Australia’s international obligations, particularly in relation to hazardous waste.

Harmonised action on waste issues of national significance is pursued through the Environment Protection and Heritage Council (EPHC) and the National Environment Protection Council (NEPC). Through these bodies, the Australian Government works with state and territory governments to develop a cohesive national approach. An important driver has been a desire to avoid inconsistent waste management regimes among jurisdictions which could adversely affect national markets.

The *National Environment Protection Council Act 1994* (Cth) aims to ensure that all Australians enjoy the benefit of equivalent protection from pollution, that decisions of the business community are not distorted, and that markets are not fragmented by variations between participating jurisdictions in relation to the adoption or implementation of major environment protection measures. Under this Act, *National Environment Protection Measures (NEPMs)* are made, which provide an instrument for state and territory and Commonwealth governments to harmonise legislation. Current waste related NEPMs include:

a. National Pollutant Inventory (NPI)
b. Movement of Controlled Waste
c. Air Quality
d. Air Toxics
e. Diesel Vehicle Emissions
f. Assessment of Site Contamination
g. Used Packaging & National Packaging Covenant

EPHC, though its working groups, is exploring different strategies to address various waste issues which the Council has assessed as being of national significance. Current work includes product stewardship options for tyres, televisions and computers, litter reduction and nationally consistent approaches to methane capture from landfill.

Future waste policy will need to have regard to the changing patterns and opportunities in production, consumption, resource recovery and waste treatment, and ensure that interventions are directed in a way which delivers the best prospects for enhanced economic, environmental and social outcomes for Australia. This is not a simple task. Policy development in the waste sphere often requires extensive analysis to clearly articulate the problems to be addressed, and to develop cost effective solutions. This task is complicated by the lack of agreed national data on many waste issues and strong community views, often influenced by overseas developments.

The issue of waste management and resource efficiency was the subject of a national Productivity Commission (PC) Inquiry in 2005-2006. While some aspects of the waste policy landscape have changed since that time, much of the ground covered by the PC Inquiry remains pertinent. In particular, the department would like to draw the attention of the current Senate Inquiry to the material contained in its two submissions to the PC Inquiry. The submissions can be found at:

Submission Number 1(PC submission number 103) :
http://www.pc.gov.au/inquiry/waste/docs/submissions?8995_result_page=2

Submission Number 2 (PC submission number 214):
http://www.pc.gov.au/inquiry/waste/docs/submissions?8995_result_page=3

The final PC report was released in October 2006 and the former Government responded to the Inquiry report in July 2007:

http://www.environment.gov.au/settlements/publications/waste/pubs/waste-efficiency-inquiry-response.pdf

The department's submissions to the PC Inquiry covered a broad range of issues associated with waste in Australia including:

- the Australian economy and material flows
- waste generation – levels of disposal and recycling in Australia and trends in those levels and community concern
- resource efficiency
- sustainable development
- the costs and benefits of waste management and resource efficiency and
- market failures and other barriers, along with possible strategies for government intervention

It is not the aim of this submission to duplicate the significant body of work that is already on the public record. Rather, the submission aims to provide additional useful information relevant to the Senate Inquiry's terms of reference. In particular, it focuses on current waste-related initiatives and the challenges faced by waste policy decision makers in Australia.

ADDRESSING THE INQUIRY'S TERMS OF REFERENCE

The following part of the submission addresses the specific terms of reference of the Inquiry into the management of Australia's waste streams.

(a) Trends in waste production in Australia across household, consumer, commercial and industrial waste streams

As noted in the department's first submission to the PC Inquiry into Waste Management, one consequence of Australia's fast-growing, materially intensive economy is the production of relatively large quantities of waste.

On a per capita basis, Australians are reported to be among the highest producers of waste in the world (ABS 2005a). Municipal waste is reported as 690 kilograms per person, the third-highest in the Organisation for Economic Cooperation and Development (OECD) (after Iceland and the United States), and higher than the OECD average of 590 kilograms. These figures are based on information collected by the OECD, and are drawn from data estimated in the late 1990s (OECD, 2004a).

To better inform the 2006 PC Inquiry and improve the national waste policy debate, the department commissioned Hyder Consulting to collate available data on waste and recycling in Australia. Hyder's report was attached to our first submission to the PC Inquiry. It showed that approximately 32 million tonnes across all categories of waste was generated in Australia in 2002–03, about 15 million tonnes or 46 per cent of which was recycled. Data were not available for Tasmania or the Northern Territory.

The Hyder report also identified consolidated disposal, recycling, generation and diversion rates for the sectors identified in the current terms of reference - municipal, commercial and industrial (C&I), and construction and demolition (C&D) - across Australia). It estimated that all jurisdictions except for Tasmania

and the Northern Territory generated about 8.9 million tonnes of municipal solid waste (MSW) in 2002-03.

The Hyder report provided trend data for waste generation but this should be treated with caution as it was based on only three data points: Sydney, Victoria and the ACT. It also projected the likely quantities of waste that may be generated in Australia in the future. Assuming an average annual per capita GDP growth of 1.88 per cent and an average annual population growth of 1.13 per cent, it predicted that disposal would rise from 17 million tonnes in 2002-03 to 23 million tonnes in 2012-13 and 31 million tonnes in 2022-23. Recycling was also estimated to also increase over this period from 14 million tonnes in 2002-03 to 19 million tonnes in 2012-13 and about 26 million tonnes in 2022-23.

Information availability

Understanding the extent of the problem, or determining whether there is, in fact, a problem with particular waste streams in Australia requires good information. However, while there is some good sectoral information and some jurisdictions have better information than others, at a national level Australia lacks reliable, comprehensive, contemporary waste information.

The department needs more robust information to allow it to better understand not only the level and types of waste generated but the implications of this for the environment, the economy and society. Apart from enhancing national State of the Environment reporting on waste issues and allowing the Australian Government to fulfill its reporting responsibilities in the Organisation for Economic Cooperation and Development (OECD), it is important that governments have access to sufficient data to support policy making for emerging government priorities, including the contribution that wastes and recycling make to national greenhouse accounts.

Attempts have been made over the last two decades to generate reliable waste management and recycling data. In 1990 the Australian and New Zealand Environment and Conservation Council invested significant funds into establishing an Australian Waste Database. For various reasons, including methodological differences between the states this database failed to live up to its expected potential. The department is considering how to enhance the level of national data on waste generation and recycling.

Further issues that the Inquiry may wish to consider are the number, performance and future capacity of landfills and the adequacy of litter measurement initiatives in Australia. There are no national aggregated data on the numbers of landfills or the environmental performance of landfills across Australia.

(b) Effectiveness of existing strategies to reduce, recover or reuse waste from difference waste streams

A brief note on the existing strategies

As mentioned above, Constitutional responsibility for domestic waste management issues rests primarily with state and territory governments and through them, local government. The Commonwealth's role has generally been confined to its

international responsibilities (e.g. the Basel Convention) and working with states, territories and local government on national issues in the EPHC and NEPC.

Some waste issues are local or regional in scope, others warrant nationally coordinated action either by way of Commonwealth legislation (as is the case with used oil), or nationally harmonised legislation (such as via National Environment Protection Measures).

State, territory and local governments implement most of the waste reduction and recycling strategies in place in Australia today, but some schemes are administered by way of Commonwealth legislation. In 2001, the Australian Government implemented a mandated product stewardship levy-benefit scheme for oil under the *Product Stewardship (Oil) Act 2000*. There are also voluntary industry strategies in place for various other products.

Some states and territories have declared zero waste or towards zero waste aspirations. Other initiatives involve state-based product stewardship or extended producer responsibility approaches to address specific products of concern (such as various electricals products, packaging, batteries and paint).

Some waste issues (e.g. management of particular types of hazardous waste) are chiefly of concern to the larger, more industrialised jurisdictions. For these issues, smaller jurisdictions have been reluctant to contribute time and effort to the development of a harmonised national approach. In this context, one of EPHC's achievements, since its establishment by the Council of Australian Governments (COAG) in 2001, has been agreement to a set of 'filter criteria' (Appendix 1) to identify waste issues that warrant a nationally coordinated policy approach. Where justified, harmonised action on waste issues of national significance is then pursued through various strategies.

The filter criteria include consideration of the:

- severity of environmental/health risks
- degree of risk of continuance or reoccurrence
- potential for resource recovery and
- downstream consequences (benefits and costs) of the issue, of unilateral action, of bilateral action, of multilateral action and of national action.

Products currently on the EPHC waste work program include: newsprint, packaging (including the National Packaging Covenant and container deposit schemes), plastic bags and degradable plastics, electrical and electronic goods (televisions, computers and mobile phones) and tyres. In addition, the EPHC is investigating whether there is justification for some form of national recycling scheme for compact fluorescent lamps.

A brief note on the effectiveness of existing strategies

As an overarching comment and based on 2002-03 estimates, the report by Hyder Consulting indicates that Australia is recycling in the order of 46 per cent of its waste across all types of waste. As part of this figure Hyder shows about 30 per cent of Australia's municipal waste is recycled and the remainder is

landfilled. It notes that Australian municipal recycling rates are comparable to (though slightly lower than) the average municipal recycling rate in Europe (30 per cent compared to 36.4 per cent). One issue to take into account when comparing these figures is that some European countries base their recycling rates on the quantity of materials going into the material recovery facilities (MRFs) (which includes some contamination) rather than the quantity of materials actually recycled. European figures can also include materials that are incinerated for energy 'recovery' – which would not generally be counted as recycled in Australia. While we are unable to quantify the impact of this definitional variation it would effectively understate Australia's level of recycling when compared to European figures.

Australia's current recycling performance is in large part due to the strategies in place at the state and local government level to deal with commercial and industrial and construction and demolition wastes, and to handle municipal waste. In addition, Australia has in place various national strategies to address the impacts of wastes identified as being of national significance. These strategies include a regulatory scheme (used oil), a co-regulatory scheme (packaging) and voluntary schemes (e.g. newsprint). A brief commentary on the characteristics of these three types of schemes is provided below. Other industry-based voluntary schemes include an agricultural and veterinary chemical container recycling scheme, the vinyl industry's product stewardship scheme and a mobile phone recycling scheme.

Work is in progress on several other national waste priorities, including tyres and various electrical products such as TVs and computers.

Used Oil (a regulatory scheme)

The Product Stewardship for Oil (PSO) Program was established by the *Product Stewardship (Oil) Act 2000* (Cth) and began in January 2001. The PSO Program which is managed by DEWHA helps protect the environment from inappropriate disposal of used motor oil by encouraging increased rates of used oil recycling. There are three components of the PSO Program:

1. the levy which is collected through Tax and Customs legislation;

2. the benefit payment which encourages increased collection and recycling of used oil in Australia by providing oil recyclers with volume based product stewardship benefits; and the

3. transitional assistance funding of $34.5 million which was provided for strategic initiatives to increase used oil recycling and ensure a sustainable oil recycling industry. This funding commenced in July 2000 and ceased in June 2007.

In 2000, when the program was first introduced, around 100 million litres (ML) of oil was not being recycled. Some of this oil was finding its way into the environment (i.e. catchments, waterways, storages and soils) causing environmental degradation. In terms of recycling performance, an estimated 150–165 million litres of used oil was being recycled before the program began in 2001. Since then, used oil recycling has increased by around 40 per cent to 220 million litres in 2006-07, significantly reducing the risk of environmental contamination by used oil.

Packaging (a co-regulatory scheme)

The National Packaging Covenant (which is a co-regulatory agreement[1] between industry and governments) and kerbside recycling play an important part in the domestic waste landscape. A total of 647 industry and government signatories to the Covenant, representing about 80 per cent of packaging used in Australia, are actively engaged in initiatives to improve the sustainability of packaging and improve the efficiency of kerbside and away from home recycling. About 90 per cent of households have access to kerbside recycling in Australia - a significant achievement given the challenge of distance in Australian communities.

The headline target of the Covenant is to increase recycling of packaging to 65 per cent by June 2010. The Covenant Council - the body with responsibility of overseeing the implementation of the Covenant - is currently working to improve the rigor of Australian recycling data which will be used to measure performance against this target. While the issue of securing rigorous data is complex, progress has been made since the revised Covenant was agreed in 2005. Work to clarify recycling data should be completed during June 2008. The data is vital for the mid-term review of the Covenant which is underway and should be completed later in 2008. This review will allow us to test how effective the Covenant has been and to see whether more needs to be done to manage packaging waste in Australia.

Newsprint (a voluntary scheme)

Newspaper and magazine publishers first committed to using recycled newsprint in their manufacturing processes in 1990 under a national Industry Waste Reduction Agreement. The original goal of this agreement was to reduce packaging waste going to landfill, but significant upstream benefits have also been achieved. The use of recycled newsprint by publishers has resulted in an increase in the newsprint recycling rate from 37 per cent in 1991 to 74.5 per cent in 2004. This reduced the amount of paper waste going to landfill by 500,000 tonnes in 2004 alone, with an associated reduction in expected methane emissions. The recycling rate was further increased to 75.4 per cent in 2006 – a very impressive figure by world standards.

Another benefit is that paper containing 40 per cent recycled fibre was found to be of superior quality to virgin newsprint. The smoother printing surface obtained by the addition of recycled fibres and clay (from recycled magazines) achieved a superior printing surface with less show-through (increased opacity). Thickness was reduced, as well giving a better, more easily stacked product. Paper roll yields were improved and waste was reduced by about 7 per cent with flow-on environmental benefits in handling and road transport. A further significant benefit of recycling old newspapers into newsprint is the reduction in energy used. Mechanical pulping of wood is an energy intensive process. It takes one-sixth the energy to make pulp from old newspapers rather than from wood.

While yet to be confirmed, the rate for 2007 is expected to have risen above 76 per cent.

---

[1] Co-regulation is an approach involving some form of government regulatory action in support of specific industry product stewardship schemes.

(c) Potential new strategies to reduce, recover or reuse waste from different waste streams

(d) The economic, environmental and social benefits and costs of such strategies

(e) Policy priorities to maximize the efficiency and efficacy of efforts to reduce, recover or reuse waste from different waste streams

The following text provides information pertinent to (c), (d) and (e) above.

This submission outlines the current approach to waste management in Australia and the current national priorities for action on specific products. As noted, voluntary, co-regulatory and fully regulatory approaches to managing the end-of-life impacts of products have been used over the last decade.

There would be value in undertaking a 'big picture' assessment of whether Australia is addressing the most pressing waste policy issues from a sustainability and a community perspective. The results of such an analysis could guide future choices on where resources are best directed in terms of developing strategies for reducing, recovering or reusing particular waste streams.

This submission does not propose particular new strategies for specific waste streams. Rather, it seeks to use this opportunity to raise several key issues that policy makers are grappling with in determining future strategies and which are of relevance to the current Inquiry:

- **The adequacy and transparency of the current EPHC waste framework for setting nationally agreed waste priorities.** The PC considered this framework to be sound in most respects. This is the framework that led to the identification of the range of product-specific priorities that are on the current national (EPHC) waste work agenda. However, several significant policy issues have transpired to have greater influence since the framework was agreed in 2002. They include climate change, energy recovery from waste (energy security) and water use.
- **Strengthened Council of Australian Government guidelines for assessing the merit of new regulatory policies agreed to by all First Ministers in late 2007.** These guidelines embody agreed COAG principles for best-practice regulation-making and provide guidance for preparing Regulation Impact Statements (RISs). Usually the development of a RIS involves public consultation on an initial or *consultation RIS*. That RIS must define the *problem* to be addressed and examine the value to society of reasonable *options* for addressing that problem. This is followed by the preparation for the Ministerial Council of a *decision RIS* which is usually more refined, rigorous and addresses any public comments. The RIS process is based on sound policy development principles which aim to deliver value to the Australian community of new policy responses to clearly identified problems. Challenges for policy makers exist in the waste realm in clearly articulating the problem to be addressed as well as presenting to decision makers a comprehensive evidence-based assessment of the benefits and costs of various options for dealing with the problem.

- **Many products, including electronic and electrical products may have diffuse impacts on the environment and some of these impacts may not be immediately apparent.** This exacerbates the problem of clearly articulating the scope of the problems that new recycling initiatives are endeavouring to resolve. Without first clearly articulating the problem to be addressed, moving directly to recycling or waste reductions strategies is open to challenge and may lead to failure to progress new initiatives at a whole of government level. By way of an example, an estimated 3 million computers are discarded each year, of which more than 90 per cent are sent to landfills across the country. Landfills vary in environmental performance. In some cases, a range of hazardous chemicals may move from the computers into the landfill leachate. Where there is poor leachate control, where landfills are not lined or where or landfill liners fail - contaminants may escape into the wider environment such as groundwater and adjacent waterways. However, it is very difficult to quantify the nature and extent of this 'problem' and the net environmental cost of such diffuse impacts, particularly when it may be decades before serious environmental impacts become evident. In considering options for how to better manage end-of-life computers, both recycling initiatives and improved landfill practices may need to be considered.

- **The role of community values in driving decisions on waste policy and resource conservation.** Applying conventional valuation techniques to most new national waste policy initiatives involving mandatory or co-regulatory recycling schemes would suggest that many are unlikely to provide a net benefit to the Australian community. Taken alone, this level of valuation raises significant questions as to whether such initiatives should proceed. For example, recycling of computers and televisions may come at a net financial cost to society. However, many in our community hold the view that we should have national recycling schemes for such products, even if there is some cost to society, e.g. for precautionary, intergenerational equity, resource conservation and/or resource recovery reasons. Should such schemes proceed? The PC commented on this issue in its 2006 report:

  > *The concerns of some community members do not justify a policy response that imposes costs on others if there is no reasonable basis for these concerns. Accordingly, community concerns should be considered, but they do not in themselves justify a policy response. Furthermore, community concerns are able to be, and should be, influenced by informed debate about risks, costs and benefits.*

  The department is undertaking work to better quantify and value the extent of community expectations with regard to waste policy issues. This work will involve informing sample communities of the known risks, costs and benefits of waste initiatives and then quantifying the extent and value of informed community concern. Gathering such information is important if decision makers are to take into account the full range of costs and benefits of any proposed waste policy strategies.

- **Strategies for influencing waste generation and disposal must be considered in a life cycle context.** A comprehensive, holistic analysis of the environmental, health and social impacts throughout a product's life cycle can reveal upstream market failures that lead to inefficient and/or harmful waste outcomes. It can help identify circumstances where adverse impacts associated

with disposal can be avoided through action at the extraction, design, manufacturing or consumption phases of a product life cycle. For example, improving the design of products may improve durability and recyclability and decrease the hazardous nature and quantity of wastes generated. In the absence of a full understanding of life cycle impacts, strategies may be selected which may move us away from more sustainable outcomes. Solutions which at first glance appear environmentally sound, may in fact be less beneficial than others (e.g. paper bags, which may have a higher environmental impact than the plastic bags they replace - the use of paper bags has increased in Ireland since the Irish Plastax was introduced). An alternate product or treatment may use more water and produce more greenhouse gases in manufacture and transport.

- **Sustainability must be the focus, with greenhouse and water use issues playing an important role in guiding national waste policy priorities.** Recycling must be seen in the broader context of a sustainable society. In this context, there may be value in considering whether current waste priorities and strategies are appropriate in the current policy climate and whether there should be an increased focus on alternative approaches such as design for sustainability.

(f) Consideration of the Drink Container Recycling Bill 2008.

Beverage containers play an important role in society but also form a significant part of the packaging waste stream and a visible component of litter. They play a valuable role in marketing, protecting and containing various beverages but effective strategies are needed to address their impacts. The proposed Drink Container Recycling Bill 2008 provides one strategy for addressing both litter and resource recovery issues. However, it is important that we have a clear understanding of what the Bill seeks to achieve, its overall costs and benefits and its impact on the sustainability of packaging more broadly.

As mentioned earlier, the current nationally-agreed mechanism for improving the sustainability of packaging is the National Packaging Covenant. Working hand in hand with kerbside recycling, the 2005 version of the Covenant is aiming to increase the recovery of consumer packaging at public places, workplace/commercial premises, and industrial premises and reduce the litter impacts of consumer packaging. The effectiveness of the Covenant is being reviewed during 2008 and EPHC Ministers will then be able to consider the evidence concerning data issues, progress against targets and, depending on the outcome of the reviews, any recommendations for improvements.

In parallel with the implementation of the Covenant over the last six years, the benefits and costs of beverage container deposit legislation (CDL) (including its possible impact on the viability of the Covenant and kerbside recycling) has been explored by several jurisdictions including the ACT, NSW, Victoria and WA. The following reports are available on the web:

ACT - Centre for Environmental Solutions -
http://www.c4es.com.au/docs/ACTNoWasteCDLES02.pdf

NSW - Institute for Sustainable Futures, University of Technology Sydney -
http://www.isf.uts.edu.au/whatwedo/2006010458_00175_CDL_Vol1.pdf

http://www.isf.uts.edu.au/whatwedo/200601046000175_CDL_Vol2.pdf
http://www.isf.uts.edu.au/whatwedo/2006010466_00175_CDL_Vol3.pdf

Victoria – Environment Protection Authority - Background Policy Paper -
http://epanote2.epa.vic.gov.au/EPA/publications.nsf/2f1c2625731746aa4a256ce90001cbb5/6d91a8a4c77802deca256cc4000f5cc1/$FILE/883.pdf

WA - Stakeholder Advisory Group on Best Practice Container Deposit Systems for Western Australia -
http://www.zerowastewa.com.au/documents/sag_cds_report.pdf

A review of published analyses indicates that there are divergent views, including between governments, about the merits of CDL and the potential costs and benefits to the community and the environment from implementing such a scheme, particularly at a national level.

One state, South Australia, already has in place a state-based container deposit scheme which predates the introduction of the first Covenant in 1999. The department understands that South Australia leads the rest of Australia with recycling of beverage containers. South Australia also has the second highest recycling rate for all products (63 per cent) but, interestingly, this is still behind the ACT which has no CDL in place (69 per cent) and works primarily through kerbside recycling. In terms of litter performance, the 2007 Keep Australia Beautiful National Litter Index shows that South Australia had the third highest volume of litter per 1000 m^3 and was one of three states in which there was an increase in the volume of litter measured.

Policy issues raised by the Bill

The national Drink Container Recycling Bill 2008 proposed by Senator Fielding raises several policy issues. For example, a CDL scheme (national or otherwise) would encompass less than 5 per cent of the total number of littered items (June 2006), with the remaining litter being outside its coverage. Moreover, a national CDL scheme would seek to influence the recycling of around 10 per cent of all packaging. Should the Bill proceed, there may be value in undertaking a thorough exploration of the benefits and costs of national CDL, and an assessment of potential environmental impacts, both positive and negative. The experience of other countries in implementing such schemes could also be considered.

In summary, a stronger evidence base is needed for community and governments to make an informed decision about CDL, and this is reflected in EPHC's recent decision to investigate the merits of potential national options for improving the level of recycling of packaging wastes such as beverage containers and decreasing the amount of packaging litter. This work will assess the environmental, economic and social costs and benefits of various waste management options, including a national CDL system. It will take into account the experience of South Australia, the results of investigations of CDL by other states and the mid-term review of the National Packaging Covenant. In undertaking this work is it important that we continue to learn from the positive and negative experiences of other countries.

EPHC also agreed to develop a national plan of action on litter reduction, given broader concerns about the impacts of litter in Australia. This work will extend beyond the 5 per cent litter due to beverage containers.

Constitutional issues raised by the current Bill

Concerning constitutional issues, the department understands that the Commonwealth does not have the constitutional power to give full effect to the Drink Container Recycling Bill 2008 because the Commonwealth's powers in relation to the matters covered by the Bill are limited. The Drink Container Recycling Bill 2008 would apply to all producers, distributors and retailers of beverages in containers. It would require that producers, distributors and retailers prepare a beverage container stewardship plan to be approved by the Minister. The plan would need to cover various matters concerning the recycling of beverage containers, including providing for minimum recovery rates for beverage containers; collection of beverage containers and the establishment of container redemption facilities with reasonable and free consumer access for the return of used containers. The Bill would prohibit the sale or production of a beverage in a container unless the container bears a refund marking with a statement as to the deposit amount for the beverage container. The deposit amount, which is to be prescribed by regulations, must be collected by the retailer from the final purchaser of a beverage in a container. A beverage container deposit facility which accepts used beverage containers must pay a person depositing a container an amount equal to at least the prescribed deposit amount. The Bill prohibits disposal of redeemed beverage containers in a landfill or incinerator.

The department understands that the principal powers under the Constitution that could be relied upon to regulate the sale of beverages in containers are the corporations' power, the trade and commerce power and powers in relation to Commonwealth territories. However, given our experience in other areas these heads of power would appear to have limited application with respect the proposed Bill. This experience suggests it is unlikely that all producers, distributors and retailers would be able to be covered by the Commonwealth and that state regulation would also be required for complete coverage. The ability of the Commonwealth to effectively implement such a Bill would need to be assessed carefully should it proceed. In any case, the department considers it would be prudent to await the results of the EPHC investigations that are presently underway.

CONCLUDING REMARKS

Recapping the main points in this submission in relation to waste management in Australia:

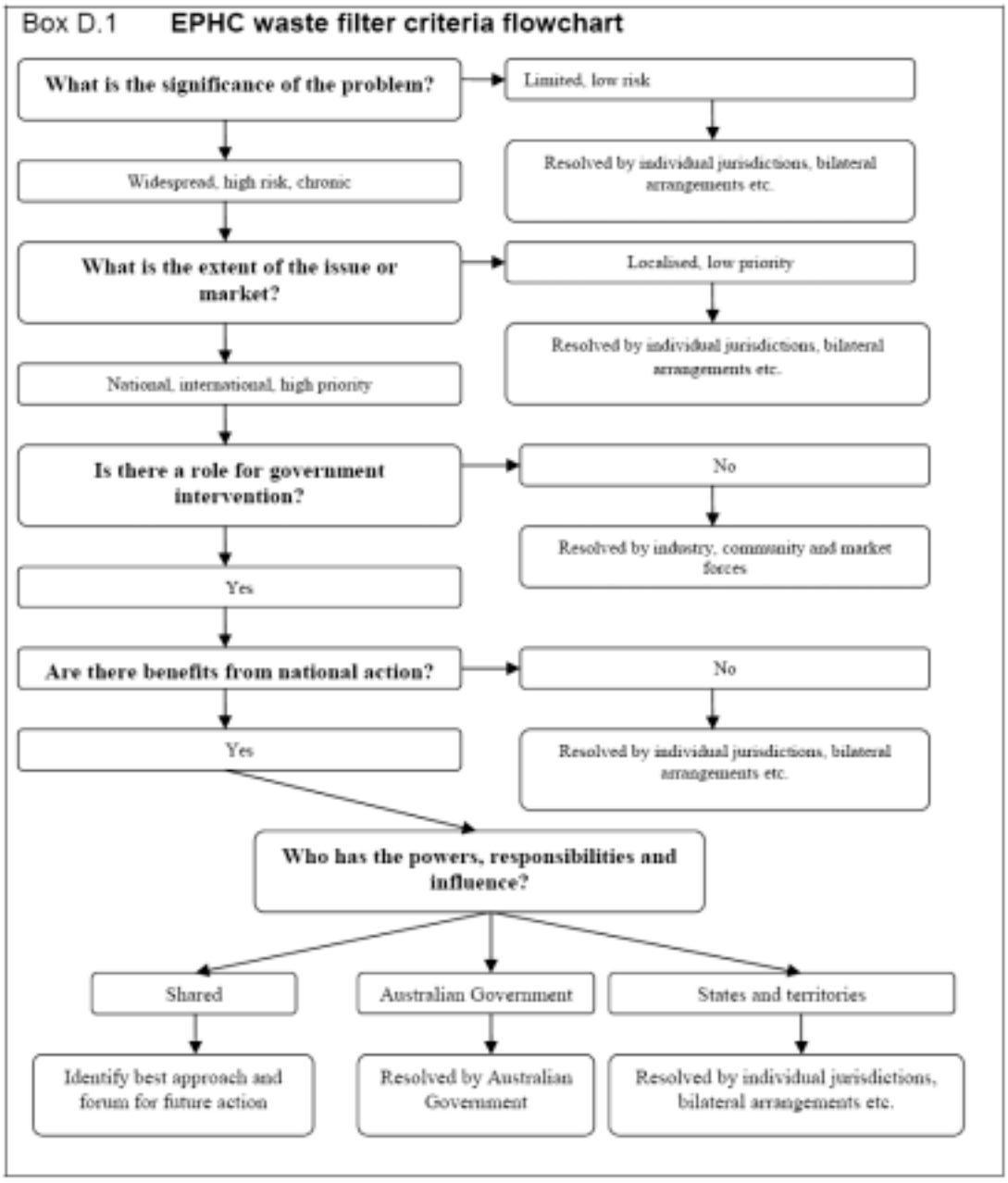
- The impact of waste remains an important environmental issue for Australia especially because of potential greenhouse and water impacts and the fact that community expectations in relation to recycling have grown in recent years.
- The Australian Government has limited powers under the Constitution to engage directly in waste management issues although it has played an increasing role in the development of harmonised national approaches for key products.
- Despite the availability of information on waste generation in some states, there remains a need for more robust national information to allow decision makers to

better understand the impacts of wastes and litter on the environment, the economy and society and to develop well targeted waste management strategies.

- There has been progress in dealing with some waste issues over the last decade, particularly in the areas of commercial and industrial and construction and demolition wastes. There has been a dramatic increase in the number of households that have access to kerbside recycling in Australia. We have in place national regulatory and co-regulatory product stewardship schemes for oil and packaging and successful voluntary recycling schemes including a world-leading scheme for newsprint.
- Given the emergence of national priorities relating to water conservation and climate changes it is perhaps timely to consider reviewing the adequacy and transparency of the current EPHC waste framework for setting nationally agreed waste priorities.
- Any national work program would need to give due recognition to the strengthened Council of Australian Government guidelines for assessing the merit of new regulatory policies agreed to by all First Ministers in late 2007. In this context there is a need to gain agreement on how to quantify and present to decision makers the non-market value of new waste initiatives, including the value of community expectations with regard to waste policy issues. New strategies for influencing waste generation and disposal need to be considered in a life cycle context. Sustainability should be the focus, including efforts to improve design and production strategies so to avoid waste problems in the first place.
- With regard to the Drink Container Recycling Bill, the department notes that several other reviews are currently underway in relation to CDL and there may be value in linking the current Inquiry into these investigations. Importantly, further investigation is warranted concerning the effectiveness of applicable heads of power available to the Government to implement the Bill.

Departmental contact: *Ms Mary Harwood, First Assistant Secretary, Environment Quality Division*

EPHC waste filter criteria and waste framework



EPHC National Waste Framework

1. Goal
2. Objective
3. Defining Issues
4. Filter Criteria
5. Prioritisation
6. Potential Tools
7. Recommendation to Standing Committee / Council

1. Goal

To assist EPHC achieve its goal to protect and manage Australia's environment and its natural and cultural heritage by identifying and addressing waste management issues of national importance.

2. Objective

To establish a systematic framework to determine waste issues upon which national collaboration would be appropriate. The framework will be used by all jurisdictions in developing proposals for EPHC action.

3. Defining Waste Issues

A crucial first step in determining whether a waste issue requires national action is to clearly define and characterise the issue.

Factors to consider in characterising the issue include:

- environmental, economic and social drivers
    - volume and toxicity of the waste
    - risks to human health
    - resource use efficiency
    - people affected
    - current costs, who is bearing them
    - potential cost of addressing the issue
- actual and potential environmental impacts
    - quantified where possible
    - whether a precautionary approach is justified
- timeframe across which the issue operates, including recovery time
- geographical context, locations affected
- existing frameworks
    - applicability
    - barriers to resolving issue through these
- research needs
- identification of stakeholders

In addition, variation in all these factors across jurisdictions should be identified and noted.

4. Filter Criteria

The standard filter criteria, tailored to waste issues, are set out below.

a) What is the significance of the problem?

Consider:

- severity of environmental / health risks
- degree of risk of continuance or reoccurrence
- potential for resource recovery
- downstream consequences (benefits and costs) of
    - the issue
    - unilateral action
    - bilateral action
    - multilateral action
    - national action

If the waste issue affects a limited area, risks are low and consequences are limited, it may be best resolved by individual jurisdictions or bilateral arrangements. If the issue affects a broad area, risks are high and consequences substantial, a national approach may be considered in light of the other criteria – see questions below.

b) What is the extent of the issue or market?

Consider:

- geographic range (which jurisdictions are affected? to what extent?)
- local (e.g. area or state/territory specific) issues or market
- statutory differences between jurisdictions (e.g. regional environment, land-use, industry)
- trans-boundary (including downstream) impacts
- international impacts
- priority of issue in different jurisdictions

If on the basis of consideration of the above the issue is localised, varies greatly across jurisdictions, has limited trans-boundary impacts and is generally of low priority, it may be best resolved by individual jurisdictions or bilateral arrangements. If the issue is of international or national significance and generally of high priority, a national approach should be considered in light of the other criteria – see questions below.

c) Is there a role for Government intervention?

Consider:

- what is the need for government intervention?
    - protection of the environment
    - advancing public good
    - protecting public health and safety
    - market failure - identify and justify intervention
- are existing legal and policy settings adequate?
    - international treaties and agreements
    - national laws, policy framework
    - state and territory laws and policies
- consequences of government inaction

If industry, community and market forces are unable to resolve the issue then Government can play a beneficial role. If the issue is adequately addressed through existing arrangements, no further action may be required. If existing arrangements are inadequate, consequences of inaction are significant, and the scale and scope support national action, a national approach should be considered in light of the other criteria – see questions below.

d) Are there benefits from national action?

Consider:

- existing laws, policies and programs
    - scope
    - effectiveness
    - gaps
- would national action duplicate or undermine existing state / Commonwealth / national arrangements?
- what are the benefits to government, industry and the community from national consistency?
- is a national approach cost effectiveness for all jurisdictions?
- what are the relative cost and benefits of other ways to get the same or better outcomes?

If national action would duplicate or undermine existing effective arrangements or if alternative approaches would generate greater benefits with fewer costs, the issue may be best resolved by individual jurisdictions. If existing arrangements are ineffective or could be strengthened through national consistency, and a national approach is cost-effective, a national approach should be considered in light of the other criteria – see questions below.

e) Who has the powers, responsibilities and influence?

Consider:

- benefits of uni/bilateral vs. national approach
- role of NEPC in regulatory solutions
- Commonwealth powers in external affairs, trade and tax
- state and territory roles in implementation and enforcement of national and international agreements
- Commonwealth role as facilitator, including working with national industry bodies
- roles of different spheres of government
- level of enforcement required
- other ways the issue could be addressed
- potential tools (see section 6)
- issue should be led by the jurisdiction(s) with primary interest

Different policy tools and approaches are available to address waste issues. Powers and responsibilities play an important role in determining which tool is most appropriate in a particular case - see Part 6 below.

5. Prioritisation

Only the most important issues, which will generate the highest environmental benefit from national cooperation, should be referred to the Standing Committee and Council for consideration.

The primary considerations in assessing priority are;

- significance of impact or harm
- analysis of the cost and associated benefits of any action and
- the level of social and community concerns

6. Potential Tools

When developing proposals for EPHC action on national waste management issues, jurisdictions should consider and evaluate a range of different policy tools so the tool most suited to addressing the issue is identified and recommended. Options and approaches outside the EPHC/NEPC framework, including informal cooperation, should also be considered.

In evaluating potential tools, jurisdictions should:

- recall the scope and scale of the issue
- recall the distribution of powers and responsibilities
- identify stakeholders
- identify capacity of government and industry
- identify (and quantify, where possible) the direct and indirect consequences of the different tools
- consider appropriate evaluation mechanisms

Refer to table of Policy Instruments attached.

7. Recommendation to Standing Committee / Council

The waste framework should be applied to all waste issues proposed for Standing Committee and Council consideration. All jurisdictions should be notified and endeavour to meet to discuss the application of the waste framework to a particular waste issue prior to it being put on the Standing Committee and/ or Council agenda.

Policy Instruments

Type	Outcomes	Strengths	Weaknesses	Examples
Research	Improved understanding of issue and potential solutions (for government and stakeholders)	Useful where emerging or poorly understood issue, or where knowledge gaps prevent proper scoping.	May be seen as delaying tactic. Government and industry capacity to address findings may be limited. Duplication problems if poor coordination.	
Information/ education programmes	Better informed public and industry	Improves understanding of issues. Can help change behaviour.	Limited ability to change practices. Hard to quantify outcomes. Duplication problems if poor coordination.	
Voluntary Standards, Guidelines (state, national)	Better performance by industry	Fosters industry ownership of issue. Promotes innovation and improvements. Provides criteria for independent performance assessment.	Unenforceable, so some industry members lag behind unless legislation forces adoption and compliance. May, however, form basis for purchasing policy and/or co-regulation program in future.	
Bi/multilateral agreements	Range of instruments – research, voluntary or mandatory standards etc. Ensures uniformity across jurisdictions involved.	Useful where transboundary but not national issue. Can improve coordination of research and action, eliminate market distortions, share costs.	Per relevant instrument.	

Type	Outcomes	Strengths	Weaknesses	Examples
Voluntary national agreements	Industry commits to meeting an agreed standard, target or other outcome	Promotes innovation and improvements. Sets uniform national goals. Requires limited government resources.	Depends on voluntary uptake by industry. Effectiveness may decrease with time as other priorities take precedence.	Industry Waste Reduction Agreements. Greenhouse Challenge.
Co-regulation (voluntary agreements with regulatory underpinning)	Industry commits to meeting an agreed outcome and after set period of time regulations mandate compliance for whole sector.	Improves performance of sector as a whole. Prevents free-riders. Enforceable.	Improvements may be limited to minimum commitment under agreement / regulations. Targets (if standard) strongly debated and are may be seen as inequitable between materials.	National Packaging Covenant
Environmental improvement programmes (innovation waivers)	Improved performance by companies or sectors over extended timeframe	Provides greater flexibility in achieving compliance. Promotes innovation. Can foster public participation in issue.	May be perceived as a way to delay change.	
Regulation (state, national)	Statutory mechanism requiring compliance with specified targets/outcomes	Concessions / exemptions can be agreed and clearly defined. Enforceable penalties for non-compliance.	Requires substantial government resources to develop, implement and enforce. May inhibit innovation if overly prescriptive.	

Type	Outcomes	Strengths	Weaknesses	Examples
Complementary regulation	Identical / equivalent statutory regime in each jurisdiction	Uniform / consistent legal framework. Provides equal and enforceable level of environmental protection across Australia. Avoids distortion of legitimate national markets.	In practice, different priorities in different jurisdictions can create patchy framework.	
Take back legislation	Industry required to take-back, recycle and finally dispose of products they manufacture	Provides strong incentive for life cycle management, eco-design. Easy to implement from a Government perspective. Can have sunrise clause (i.e. effective from a certain date).	Difficult to obtain industry agreement to legislation. Potential trade barrier. Take back mechanism may be expensive to implement. Depends on credible enforcement and industry capacity for disassembly and reprocessing. Needs audit trail, or may encourage illegal landfilling or dumping.	NEPM (Used Packaging Materials). EU packaging programs. SA container deposit legislation.
Financial sanctions (taxes, levies)	Financial charges on waste or virgin materials. Funds generated may be used to reduce waste and encourage alternatives, reuse and recycling.	Can encourage waste avoidance and help internalise cost of environmental impact of waste. Provides funds to help address problems / pursue opportunities. Raises industry awareness and encourages innovation.	Funds may not be fully hypothecated, may be delays in allocation. Constitutional constraints on excise. May be considered anti-competitive. Waste volumes / weights (basis of levy calculation) are not always proportional to environmental impact.	Waste oil levy. Landfill levies. Product levies.

Type	Outcomes	Strengths	Weaknesses	Examples
Tradeable permits	Property rights in resource use / emissions, traded in market.	Drives innovation, new processes. Helps ensure environmental resources put to most valuable use. Permits can be retired (by government or NGOs) to reduce overall emissions / resource use.	Require national scheme for cross-border trade. Requires rigorous audit and enforcement regime to maintain integrity.	Import licences for ozone depleting substances under Ozone Protection Act (Cth). SO_2 emissions trading in USA
Financial incentives (taxation relief, grants, subsidies)	New products, technologies etc developed and introduced which reduce waste and/or improve resource use efficiency.	Encourages and supports innovation. Can generate rapid improvements.	Eligibility criteria often disputed. Tax rebates not effective until end of financial year. Often only a small number of beneficiaries. Need to identify appropriate source of funds. May generate isolated improvements rather than broader change. New technology may not be 'shared', limiting environmental improvements.	Cleaner Production grants and loans schemes Rebates for solar hot water and energy systems Tax incentives for R&D.
NEPM	Uniform national framework (may be standards, co-regulation, legislation etc)	Useful for issues that operate or have impacts over a national level. Ensures coordinated and consistent approach.	Requires substantial government resources to develop and implement.	NEPM (Movement of Controlled Waste)