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23 May 2008

The Secretary
Senate Standing Committee on Environment
Communications and the Arts
PO Box 6100
Parliament House
Canberra ACT 2600

Submission on Drink Container Recycling Bill 2008

Introduction

This submission to the Senate Standing Committee provides background and an analysis of the issues associated with the proposed Drink Container Recycling Bill 2008, proposed by Senator Steve Fielding, Leader of the Family First Party and to provide a summary of the implications for Brisbane if CDL was to be implemented.

Due to the short time frame available to provide a response, a submission from full Council was not achievable. The opinion expressed in this submission is based on Technical Waste Management experience of the writer, rather than views of a political nature.

Background

The forerunner to Drink Container Recycling, also known as Container Deposit Legislation (CDL) was initially introduced in 1971, as a Bottle Bill into Oregon USA. This process followed in other US States and then Alberta and British Columbia in Canada.

South Australian Model

While CDL has been implemented in many parts of the world (some successfully, some unsuccessfully) most reference to CDL is based on the South Australian Model.

Deposit refunds on beverage containers in South Australia have existed since the last century. They were traditionally used on a voluntary basis by beverage manufacturers and bottle handling enterprises.

The Adelaide Bottle Company has collected, washed and hired refillable 'Pick Axe' beer bottles to the South Australian Brewing Company, Coopers Brewery and other breweries since 1897 (Beverage Container Unit 1991).

The current South Australian CDL system was introduced in 1975 , prior to kerbside recycling systems in Australia. While initially limited the systems now captures a broad range of beverage containers that contribute to the litter stream, particularly flavoured milk and pure fruit juice in containers with a capacity of *less than one litre*.

Non-carbonated, soft (non-alcoholic) drinks such as vitamin drinks, sports drinks, iced teas, fruit drinks, and other soft beverages in containers with a capacity *up to and including three litres* are now also included within the scheme. However, the scope of the legislation specifically exempts plain milk containers and pure fruit juice and flavoured milk in containers with a capacity of *one litre or greater*.

An extensive system for the return of containers evolved in South Australia, based on collection depots known as 'marine store' dealers. Depending on the type of container, returns could be made to retailers or to collection depots. Initially there were 31 depots in the metropolitan area, spaced no further than five kilometres apart and 76 depots in major and minor country centres. The depots supplied their containers to five industry super collection agencies under a system of secured agreements.

The National Packaging Covenant

At the meeting of the Environment & Protection Heritage Council (EPHC) on 23 May 2003 ministers deferred consideration of proposals to consider CDL across Australia in favour of continuation of the National Packaging Covenant (NPC) as the main national mechanism for managing packaging waste and will wait until after it has been evaluated before considering alternative packaging waste proposals. EPHC Ministers reaffirmed their commitment to the Covenant by extending it as NPC Mk II.

The NPC requires brand owners to:

- Recover recyclable materials by through their own efforts by undertaking to use a specified amount of recycled material in their packaging depending on the particular industry.
- Take responsibility for the lifecycle of the packaging. This can include that it is reused or recyclable.
- Contribute funding to assist with or undertaking litter prevention programs. This results in the spread of responsibility for litter prevention programs outside of government.
- Contribute funding to assist industries implement process which reduce waste generation and improved environmental outcomes and to assist councils to implement best practice kerbside recycling systems.

While not a perfect model, the NPC provides a Product Stewardship arrangement which addresses lifecycle issues for of a range of container products, including packaging, whereas CDL is a collection (end of pipe) solution.

If companies don't voluntarily participate in the NPC they are subject to penalties under a National Environment Protection Measure (NEPM). The proposed CDL legislation does not appear to provide this safety net.

Ongoing Debate and Evaluation

Since the mid 1970s CDL has been proposed in a number of Australian states and debate on the benefits of has continued since. Various Australian studies have looked at the economic efficiency effects of CDL – the major studies include, but are not limited to:

- A study on the glass industry by the Industries Assistance Commission (1987)
- A study on recycling by the Industry Commission (1991).
- The Commonwealth Business Regulation Review Unit (1989) has also undertaken an assessment of CDL, arguing that such legislation resulted in significant costs to the community. However, the scope, methods, assumptions and data of this study were criticised widely.
- C4ES (2000) completed a study for the Implementation of CDL into NSW.
- The Independent Review of CDL in NSW (2001) (*The White Report*).
- The Victorian EPA conducted a study into CDL (2002). A peer review of this study was completed by the renowned British environmental consultancy, Perchards.
- The ACT No-Waste Review of Impacts of Implementing CDL into ACT(2002).

Summary of Findings of All Studies

Some studies agree on a number of topics but there are also wide variations of findings. About the only two things on which Proponents and Deponents agree are:

- All reviews agree that the environmental management principle of producer responsibility is an important policy approach to managing the environmental impacts of post consumer waste;
- All reviews agree that any additional costs of alternative systems such as CDL will not be borne by industry but in fact passed on to the consumer;

Perceived Advantages

Supporters of CDL, reinforced by a study undertaken by the Institute of Sustainable Futures, suggest that CDL is the preferred option to NPC MkII. Supporters say that CDL has the potential to improve litter management, improve the efficiencies of domestic recycling and to shift the costs of recycling from local government to the packaging industry. Some of these benefits included in Senator Fieldings' introduction agree with findings, however some vary.

The following is a summary of the main perceived benefits of introducing CDL:

- CDL has the potential to improve the recycling rate for beverage containers from the current 45% to 80% due, in the main, to an increase in recovery from the non-residential sector;
- Implementing a CDL scheme has the potential to deliver a net gain for society when environmental and social benefits are balanced against the financial costs;

- The environmental benefits for the recovery of beverage containers is claimed to be $800/tonne, compared to $43 per household for the entire recycling stream as claimed in the Independent Assessment of Kerbside Recycling;
- The net benefit (including economic valuation of environmental benefits) associated with recovering and recycling an average beverage container is 8-9c per unit through CDL compared with the costs of providing the necessary infrastructure and operation costs of 2-3 cents;
- A CDL system will result in a net transfer of the costs of used beverage container recovery from ratepayers to consumers; and
- Local Government costs may be reduced as a result of reduced sorting costs for recyclable materials and through the collection of unredeemed deposits from containers set out of kerbside collection. However this needs to be considered in light of current contractual arrangements where, in general Materials Recycling Facility operators would gain the benefit until contracts are adjusted.

Perceived Disadvantages

Conversely, studies undertaken by various agencies, particularly the Victorian EPA study and its associated peer review undertaken by the world-renowned environmental consultants, Perchards Pty Ltd, raise serious concerns about the capacity of CDL to deliver these benefits.

In particular the limited scope of CDL (beverage containers only) and the fact that the additional cost of the system to deliver the suggested environmental benefits will be borne by the general populace, including low income earners, are highlighted by these studies. The following provides a summary of some of the issues raised in these reviews

- CDL would only apply to beverage containers which make up about 4% of the domestic waste stream and approximately 10% of the litter stream;
- CDL would result in the management of only 10% of the litter stream. The other 90%, including food wrapping, cigarette butts and plastic bags would not be managed under a CDL scheme;
- Most surveys conducted in Australia have indicated that one of the most highly valued services offered by Councils is kerbside recycling services;
- The South Australian model was introduced prior to the introduction of the Kerbside Recycling Program. Contracts for the kerbside program were based on all high value items being collected through the CDL system
- All reviews state that CDL would be introduced in addition to, rather than a replacement for other recycling initiatives – there has been no case where successful implementation of CDL has been introduced where a comprehensive kerbside program is in place;
- It would be very difficult for Councils to discontinue recycling services as a result of the high value placed on the service by ratepayers;
- It is suggested that when CDL and kerbside recycling systems are operated together, neither system works as well as on their own;
- Data suggests that the infrastructure costs (some of which would be borne by local government) of introducing CDL would cost $123 million in NSW alone;

- A survey of South Australian residents who take containers to depots, do so infrequently. Of residents surveyed, 39% never take containers to collection depots, while 19% do so when convenient, 14% do so every 2-3 months and 11% redeem containers monthly.
- In South Australia, 82% of residents surveyed said that if kerbside recycling and collection depots were equally convenient, they would recycle at kerbside. This finding is especially significant considering that 93% of metropolitan Adelaide residents live within 5km of a collection depot.
- Economists suggest that Council costs (and accordingly rates) would actually increase under a CDL scheme;
- CDL removes the high value products from Council domestic recycling systems leaving only the heavy low-value items. The C4ES study on *The Effects of Implementing CDL in NSW*, provided comprehensive detail which showed that CDL would impact significantly on kerbside recycling programs. (*The principal of this study was an Environmental Economist who had first hand experience in implementing CDL in the US State of Florida).*
- The introduction of CDL would cost the average household between $111 and $157 per annum;
- The cheapest form of CDL costs 2.5 times more per household than the cost of providing domestic kerbside recycling services;
- The cost of a carton of beer could potentially increase by up to $4.00 and a can of soft drink by 4-14 cents as a direct result of the introduction of CDL;
- British consultancy Perchards Pty Ltd, in the review commissioned by the Victorian EPA, noted "the non-monetary benefits of CDL would need to be very large indeed to justify the introduction of this measure."
- Studies by the ACT and Victorian Governments concluded that the introduction of CDL would be an expensive, environmentally undesirable and inefficient addition to Australian waste management systems. Western Australia and NT initially agreed with that, however have been reviewing their situation.
- The ACT No-Waste evaluation determined that CDL would have represented an increased marginal financial cost of $2.8m to $5.9m per annum for recycling in the ACT. The implementation of CDL would have effectively doubled and maybe tripled the ACT costs of kerbside recycling and would involve a marginal cost of $900-$1,900/tonne to recover an additional (hypothetical) 10% of beverage containers. These costs would have to be passed on to residents. These costs did not factor unquantified costs for auditing, enforcement and education

In summary, while the need to better manage litter and improve the recovery for packaging waste for recycling is unquestioned, studies question the capacity of CDL to realise these outcomes in a cost effective way. Data shows that the majority of kerbside systems around Australia are cost effective and have the capacity to achieve a greater recovery rate across a broader range of recyclable commodities than CDL ever could.

Litter

CDL is pictured as a means of recovering more beverage containers and reducing litter. People say that the moment you cross the border into South Australia the reduction in roadside litter is dramatically evident. Senator Fielding quotes litter reduction of at least 15%.

A search of a range of litter studies revealed that many litter specialists dispute this figure. The amount of litter at any point in time is affected by things such as variations in rainfall, wind and the usage of beaches, which in turn are all influenced by temperature and the time of the year. Street cleansing regimes and the amount of litter traps installed also affect the amount of litter at any point in time.

Different sets of data tell a different story, for example, Clean Up Australia Day data for 2001 includes beverage containers in the top ten litter items at a total of 18.5% contribution to all rubbish surveyed. This includes the listed items:

- Glass alcoholic beverage bottle (5.9%)
- Glass pieces (4.0%) [assuming they come from beverage containers]
- Metal/aluminium soft drink cans (3.1%)
- Plastic pet bottles (2.7%)
- Plastic water/soft drink bottles (2.8%)
- Related items that are not part of CDL collections but are related to beverages are:
- Plastic bottle caps/lids (4.2%)
- Plastic straws (3.2%)

This makes the total associated beverage litter 25.9%.

Experience over the years has shown that a range of measures, such as education, enforcement, the provision of infrastructure and the exercising of product stewardship by the manufacturers of products that are littered, need to be implemented successfully to make an impact on litter in the environment. CDL on its own is merely a collection system which will not make such a dramatic effect without the other components of the process.

Other Economic Instruments

It is suggested that other policy approaches directed at Product Stewardship or Extended Producer Responsibility (EPR) may provide more cost effective mechanisms for achieving the desired outcomes that do not have a "significant" cost impact on the community. The two major instruments already being considered by Federal Govt are:

- Advance Recycling Fees (ARF) – This alternative is based on Advanced Disposal Fees (ADF) which requires the payment of fees in advance of product sale that reflect non-funded costs associated with collection, sorting and reprocessing of a product/ package. The fees are distributed to parties involved in resource recovery to cover or subsidise the cost.

This approach could also facilitate the development of trading schemes whereby organisations exceeding specific targets are eligible to sell credits (eg fee discounts) to organisations not achieving specific targets. Unlike CDL, the ADF is broad–based and could be imposed across all commodity groups and is in keeping with the User Pays Principle.

- Mandatory Take Back – (EPR) – Based on international precedents, this alternative approach requires producers to take-back and reutilise their packaging and assumes material-specific resource recovery targets at average European levels. Modelling of this option is packaging material, but not supply chain and is premised on comprehensive recovery/recycling targets for specific materials. For this process to be effective, greater gains would need to be made on the implementation of Product Stewardship arrangements in Australia

Affects of Implementing CDL in Brisbane

The continuous evaluation over the past thirty years has done nothing more than confuse communities and provide more questions than answers. There are logical and well founded arguments – both for and against
A major consideration though, is that CDL has never been tested against other options through any form of cost-benefit analysis. As it has not been tested against other options and there is continued debate surrounding its relative benefit, it would be difficult to justify pursuing a policy option that may or may not be in the best interests of the community.

However, with the introduction of an alliance with our waste contractors, Brisbane's kerbside system is now one of the most effective recycling systems in Australia.

The success of Brisbane's kerbside collection system is demonstrated through the increased diversion of a wide range of packaging materials from the waste stream, including those high-value containers that would be recovered in a CDL-type system.

Brisbane also has a Public Place Recycling system in place in major parks and promotes Event Recycling. A new Litter Prevention program is also gaining momentum with some good early results.

Brisbane's recycling system is well patronised by residents. Considering South Australian residential surveys on CDL depot usage, compared with the convenience of the current systems in Brisbane, it is unlikely that residents would effectively use CDL infrastructure. Also, people would most likely drive to a CDL depot for refunds – Would they be willing to do so with the price of fuel? What effect will this have on Brisbane's roads and traffic congestion?

The combined recycling services provided to Brisbane residents has a positive affect on wider environmental and climate change issues and contributes significantly to broader socio-economic improvements by providing jobs business opportunities for waste management and associated resource recovery industries. Sporting and community groups would perhaps be beneficiaries of a CDL system, but at what cost?

This would be true also for all councils within SEQ and throughout Queensland. The Queensland government is providing opportunities for financial assistance through NPC funding to local government, to introduce public place and event recycling systems and to construct and upgrade resource recovery facilities at landfills and transfer stations, for those Queenslanders who do not have access to a kerbside recycling system.

It is evident that the introduction of CDL in Brisbane would require significant investment in infrastructure for the CDL process to be effective across the city. While these costs have not been determined, considering the extent of CDL depots in South Australia and based on costs for the planned upgrade of existing resource recovery infrastructure in Brisbane, costs are conservatively estimated in the region of $30m-$40m

Based on the ACT evaluation in particular, CDL would represent an extra collection system competing for the same products, with additional costs. It would seem a ludicrous argument to scale back kerbside recycling (the most popular service provided by Council) to introduce CDL.

Kerbside collection costs would not be reduced under CDL, as CDL system would not reduce the quantity of paper or other non-CDL materials collected through kerbside. In fact, it appears more than likely that if CDL was introduced, there may be even greater costs to Council through a loss of commodities normally recovered by current recycling collection and processing contracts. Extra costs would also be incurred for additional education and communication and enforcement issues.

The introduction of CDL will have a significant effect on current revenue from - we are likely to lose half or possibly all of this revenue

Based on all information available at this time, the implementation of CDL in Brisbane does not appear to be a sustainable option.

Council would be better served in developing and improving existing recycling and resource recovery processes and lobbying for implementation of broad-based Product Stewardship or Extended Producer Responsibility initiatives.

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