

Shoalhaven City Council Response to:

Inquiry into Municipal Waste Management in NSW –

LEGISLATIVE ASSEMBLY - STANDING COMMITTEE ON PUBLIC WORKS

The terms of reference for the inquiry indicate that the following five aspects of municipal waste will be examined in particular:

1. The effectiveness and appropriateness of current municipal waste management
2. Impediments and incentives to best practice municipal waste management.
3. Best practice methods, including cost effectiveness, of planning and providing municipal waste management services.
4. The development of new technology and industries associated with waste management.
5. Minimising harm to the environment in the provision of waste management services.

In addition the landfill levy has an enormous impact on only a few NSW councils, including the Shoalhaven. It affects, both positively and negatively, waste management decision making in some of these councils. Therefore a sixth item is added as:

6. State Government landfill levy (Section 88 of the Protection of the Environment Operations Act).

1. The effectiveness and appropriateness of current municipal waste management

Kerbside collection system - Within the Shoalhaven context municipal waste management services to 88% of the community is considered to be effective, using a 2 bin system with a choice of different sized garbage bin (80, 120 or 240 litre) collected weekly together with a fortnightly collected commingled recycling bin. However the Shoalhaven is a mix of urban and rural residents where urban residents receive a high quality kerbside waste and recycling collection service, but rural residents (approximately 12% of the population) do not. There are valid reasons for not providing a kerbside service to the rural residents, including:

- The unit costs of collecting one or two bins over a long travel distance do not stack up (an estimate is that it would require an increase in the domestic waste management charge of 18 to 20% across the whole city to incorporate the rural residents into the service)
- Some rural roads are narrow, unsealed and unsafe to service using large vehicles
- Most rural roads are not through roads, which effectively doubles the distance travelled to collect a bin.

Shoalhaven have provided an alternative system by maintaining ten recycling and waste transfer depots located throughout the council area where recyclables can be deposited free of charge and waste is deposited for a charge. While this system is effective, there have been calls to extend the kerbside system into rural areas, which will allow council to close the cost inefficient recycling and waste depots. For either option the provision of a rural service represents a significant cost burden on council and the community.

The kerbside collection service in the Shoalhaven has been contracted out, with the cost of recycling at the MRF incorporated into the bin lift price. Council therefore do not attract income from the sale of recyclables, nor do we incur a loss if the commodity prices drop significantly. This provides a level of security in terms of budgeting, but does not engender Council innovation.

2. Impediments and incentives to best practice municipal waste management.

The only way to provide an *incentive* to a Council that a certain method of municipal waste management should be adopted as best practice, is to ensure that it is practical, readily achievable, economical and does not compromise the lifestyle of most residents. A uniform standard across the state is a desirable outcome, but allowances need to be made for the differences in low population density areas, who cannot take advantage of solutions that rely on scale to provide economies.

One of the new *incentives* published by the City and Country Environmental restoration programme is addressed in section 6 – levy issues. This is not considered to be an incentive but rather an appeasement payment for councils “doing the right thing”.

One of the major *impediments* to best practice municipal waste management is the administration of the levy (again refer to section 6). In particular levy rebates will be disallowed if the recycled or reprocessed material is used within the landfill boundaries. For example with the levy at \$50 to \$60 per tonne within 5 years, and being placed on cover materials (clean fill) and crushed concrete it would be cheaper to purchase raw materials from the local quarry.

Container Deposit Legislation – it would be appropriate within this section to bring up the longstanding debate of container deposit legislation (CDL). Placing a deposit on recyclable containers would result in a reduction in recyclable collection requirements, would result in a less commingled recyclable stream and provide a cleaner recycled product. It would also provide a massive incentive for the traditionally anti-recycling community to earn some income for recycling. An offshoot benefit would be reduced litter, a burden on every council.

One further impediment to best practice municipal waste management is the *high tourist influx* into the coastal regions during the holiday periods. The Shoalhaven for example is quoted to have its population quadrupled during the Christmas school holidays.

3. Best practice methods, including cost effectiveness, of planning and providing municipal waste management services.

Best practice guidelines are developed for Urban and Metropolitan Councils, and often these are inefficient, costly or not achievable in rural areas. For example the DEC/JRG publication of “*Good Practice Performance Measures for Kerbside Recycling Systems*” based its key performance indicators on an assessment of 21 metropolitan councils.

However regional and rural areas need to have their specific issues addressed independently of the influence of the urban metropolitan councils. The Shoalhaven will be used as an example to indicate some specific problems. The Shoalhaven is a mix of urban and rural residents where urban residents receive a high quality kerbside waste and recycling collection service, but rural residents do not. Rural residents are provided with staffed recycling and waste transfer depots (ten of them located throughout the council area). While the urban recycling service achieves most of the KPIs considered to be “good practice”, it is not possible to achieve the same results in the rural areas.

Some comparative statistics are provided in Table 1 for three broad categories of councils in NSW as differentiated in the POEO Act for the purposes of the waste levy:

- the Sydney Metropolitan Area (SMA),
- the Extended regulated Area (ERA), and
- the rest of NSW (Rural):

Table 1: Population Densities in NSW (figures as at 30 June 2002 – DLG website)

	SMA (39 Councils)			ERA (13 Councils)			Rural (120 Councils)		
	Population	Area (km ²)	Persons /km ²	Population	Area (km ²)	Persons /km ²	Population	Area (km ²)	Persons /km ²
Total	3,687,259	3,696	998	1,217,505	14,883	82	1,680,582	687,523	2.4
Max*	269,855	462	6,782	191,074	4,568	784	77,353	53,510.8	638
Min*	13,543	5.8	237	20,120	147	16	1,330	52	0.05
Ave*	94,545	94	2,658	97,309	1,296	192	14,004	5,729	25

*The maximum, minimum and averages relate to the whole series and are not necessarily the same location across population, area and population density.

In the Shoalhaven, the population of 89,317 is distributed over 4,568 km² resulting in a population density of less than 20 persons per km². This is lower than the rural average of 25. Possibly more indicative of the differences in scale of operation would be number of bins picked up or tonnes collected per km travelled by the collection truck. These statistics are provided for the Shoalhaven in Table 2.

Table 2: Shoalhaven Detailed Kerbside Collection Statistics for July 03 to June 04

July 03 - June 04	Recycling	Garbage	Combined
Council Area (km ²)	4,568	4,568	4,568
Total distance travelled (km)	200,301	283,992	484,293
Total tonnes picked up	10,728	20,759	31,487
Total number of pick ups	837,057	1,894,810	2,731,867
Tonnes / km	0.1	0.1	0.1
Pick ups / km	4.2	6.7	5.6
Tonnes / km ² / year	2.3	4.5	6.9
Pick ups / km ² / year	183	415	598

Details of vehicle kilometres travelled per year are not readily available for other metropolitan or rural councils, so a simple comparison is made on total tonnes collected per square kilometre and garbage, recycling and total household tonnes collected per person. The comparison is provided in Table 3.

Table 3: Comparison: Relevant SMA Councils to Shoalhaven (ref. Local Government Comparative Information 2003/04, DLG NSW)

Selection from SMA Councils	Waverley (most densely populated)	Manly (ave popln density)	Camden (least densely populated)	Comparison - Shoalhaven
Population	62,396	38,790	47,818	89,317
Area (km ²)	9.2	14.5	201.3	4,568
Persons /km ²	6,782	2,675	238	19.6
Recycling (t)	8,366	7,756	9,442	10,728
Garbage (t)	19,459	6,812	10,146	20,759
Total (t)	27,825	14,568	19,588	31,487
Total t/km²	3,024.40	1,004.70	97.3	6.9
Recycling kg/p/y	134	200	197	120
Garbage kg/p/y	312	176	212	232
Total kg/p/y	446	376	409	352

Metropolitan areas collect between 97 to 3,024 tonnes per km² compared to the Shoalhaven's 6.9 tonnes per km² and even less is achievable in the more remote Councils. Clearly there are massive economies of scale in the metropolitan areas that are simply not achievable in the rural and regional areas.

The problem is compounded by the fact that reprocessors of recyclable materials require a significant throughput of material in order to make their own operation cost effective, and are therefore not interested in the regional or rural market. In order to achieve the stated recycling targets regional and rural councils will have to transport the majority of their collected recyclable material to reprocessors in the Sydney Metropolitan area.

The current "state of the art" being touted through DEC is a 3 bin system, garbage, recycling and green/organics. The lower the tonnes per km² the less affordable it becomes to provide 2 or 3 collections per week. The costs for rural and regional councils

will therefore become significantly higher than for metropolitan councils in order to achieve "best practice".

4. The development of new technology and industries associated with waste management.

The development of new technologies for processing waste and recyclable materials is arguably one of the most exciting and fastest growing fields of research. However, in order to place it in perspective, the current methods all rely on large quantities (in excess of 50,000 tonnes per year) to be cost effective. Add to this the fact that none of these new technologies has yet proved to be as effective as the technology providers claim, rural and regional councils are again left to flounder with the choice of paying high prices for transport, paying high prices for supporting a new technology in the area, or simply declining to subscribe to the NSW waste avoidance and resource recovery strategy.

The huge landfill levy increases announced in November 2005 were specifically designed to address the differential between the cost of landfill and the cost of alternative processing technologies. The question needs to be asked whether the differential of \$50 to \$60 per tonne is simply going to make certain cumbersome and unproven technologies artificially cost effective. These could then be implemented while ignoring the impact of the vast cost increases (greater than 50%) on the consumer and the low risk landfill options (proven technologies) for remote and rural communities. It seems that a financial instrument is the only method for getting alternative technology providers into the market, yet this is a very blunt and one sided instrument.

Furthermore, with the sudden change in levy which does not comply with the levy calculation in the POEO (Waste) Regulation, can the technology providers be assured that the levy will remain for the duration of the necessarily long term contracts? It could quite possibly be removed or reduced 5 years down the track, or with a change in government, and take the foundation out of their financial platform.

What has been lost in the AWT debate has been the need for technologies that process small volumes at an affordable unit price. A higher emphasis on developing these low volume technologies will allow waste to be treated at or close to source, for example in large shopping centres, resorts, or small council areas, and will reduce or eliminate costly transport requirements, and the significant impact of transport on the environment. Instead of putting the levy monies into the state general revenue, it should be directed to research and development into these technologies.

5. Minimising harm to the environment in the provision of waste management services.

Council waste management services are specifically tasked with collecting domestic waste and minimising the public health issues that could result from poor waste management practices. This works well in the SMA where most of the councils only provide the domestic kerbside collection service, do not operate landfills and leave the private sector to manage commercial waste. However, in rural areas the quantity of commercial or industrial waste is low and generally not considered to be viable for the private sector to manage. Councils in the rural areas need the commercial sector to ensure growth in the community and therefore tend to take on the disposal of commercial wastes, usually by landfill.

The management of wastes, even if only household wastes, brings with it a myriad of potentially hazardous materials. For example, batteries (lead acid and cells of various forms), refrigerant gases, contaminated soils, gas bottles, fibro products incorporating asbestos, chemical weed or pest control, CCA treated timbers, smoke detectors, electronic waste, home treatment medical wastes would include some hazardous materials that are produced in small quantities at home. Issues become contamination of the recycling stream, health and safety for waste operators, and the risk of longer term harm to the environment.

Rural and regional councils again do not have privately or state run collection and disposal organisations (as are available in the SMA). The private sector is reluctant to set up collection, processing or disposal systems due to the small quantities involved and the corresponding high costs. Some relief has been provided through the annual DEC household hazardous waste collection programme, however this does not capture the commercial or industrial market who have similar transport logistic problems.

The waste management sector is being held responsible for solving the difficult to manage wastes at the "end of the pipe". These materials should be managed further up the line to reduce or eliminate the problem before it becomes a waste. A good example is the ubiquitous asbestos issue. Councils are being held accountable for asbestos cement products found hidden within other building waste loads tipped at the landfill. State government has neglected its own duty to provide measures to ensure that asbestos is not removed without controls (a demolition of less than 200m² of asbestos cement sheeting is considered acceptable, but one bit of that sheeting on the landfill is considered too high a risk for the operation). The state government has stated that it is councils responsibility in terms of the OHS Act and therefore we would need to inspect every load as it is tipped. This will require an additional person and a backhoe, which at a rural site accepting only 10,000 tonnes of waste a year will increase the operating cost by \$20 per tonne. This is simply not affordable or sustainable.

6. State Government landfill levy (Section 88 of the Protection of the Environment Operations Act).

Equity in the application of the levy – within 5 years Shoalhaven, a Council in an obviously disadvantaged rural / regional area will be paying the same levy amount as the Sydney metropolitan areas, but will incur disproportionately higher costs in recycling or diverting material from landfill. Other councils similar to the Shoalhaven in geography, and population demographics such as Eurobodalla, Wollondilly and Blue Mountains will not be paying the levy (refer POEO Act)

The levy is applied to materials such as asbestos, which are prohibited from being reused or recycled by the same legislation, the Protection of the Environment Operations (POEO) Act, that introduces the levy. The levy is designed as a financial instrument to minimise waste to landfill and encourage reuse and recycling of materials. However it still applies to materials that have no alternative use but landfill.

Administration of the levy – as from 1 July 2006 the levy will apply to all material going into the landfill and exemptions will only apply to material sold out of the landfill area. This means that rebates will not be allowed when clean fill is used as a daily cover material, when concrete is crushed and used as a hardstanding surface for roads, for processing stockpiles and for wet weather tipping areas. All these are essential to the sound operation of the landfill but at a cost of between \$50 and \$60 per tonne in 5 years time, it will become cheaper, especially in rural and regional areas, to purchase non-renewable virgin raw materials from the local quarry than to recycle materials and reuse them on site. In this case the levy is obviously not achieving the stated environmental goals.

Levy increases way above inflation affect the budget of not only waste services but users of the waste landfills such as road and park maintenance, street sweepers, drain cleaners and litter collectors. However these functions are funded through the general fund (Local Government Act). The general fund is subject to significant rate pegging pressure with the Department of Local Government dictating the maximum allowable increase in rates each year. These increases are usually linked to inflation (3.6% this year). A 54% increase in the levy (\$15/t up to \$23.10/t this year) without considering or allowing for the impacts on other costs is negligent.

Proposed rebates – the *City and Country Environmental Restoration Program* commits to a rebate to councils who are subject to the levy of \$80 million over the next 5 years. Working proportionately this amount is equivalent to \$92,000 for the Shoalhaven next financial year out of a total of \$1.8million, 5% of what the Shoalhaven is estimated to pay in the levy. It would appear that this rebate is offered to placate Councils rather than addressing the real issue of an unfair tax on a small number of Councils.