



NATIONAL OFFICE

12 April 2006

Legislative Assembly Standing Committee on Public Works  
Inquiry into Municipal Waste Management in NSW  
Parliament House  
Macquarie Street  
SYDNEY NSW 2000

*Att: Ms Carolynne James*

Dear Ms James

**RE SUBMISSION TO THE INQUIRY**

Please find attached Collex Pty Limited's submission to the Inquiry into Municipal Waste Management in New South Wales.

By way of summary, it is Collex's contention that:

- State sponsored market distortions are deleteriously impacting the municipal waste market;
- There exist numerous impediments to the adoption of best practice principles;
- Optimal planning and service provision is being eroded by a range of factors and influences;
- Development of new technologies is being hindered by the actions of a State Owned Corporation;
- There is a lack of understanding of environmental health and safety impacts of emerging techniques.





Collex's submission is focused on highlighting existing marketplace issues in a constructive manner. Further, Collex submits a range of recommendations aimed at enhancing and optimising municipal waste management practices and policy.

I look forward to meeting Committee Members at the Woodlawn Eco-Precinct on 21 April 2006.

Should you have any queries in relation to Collex's submission, please contact Mr Richard Berry on 02 8571 0000.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Doug Dean'. The signature is fluid and cursive, with a long horizontal stroke at the end.

**Doug Dean**  
Managing Director



Legislative Assembly – Standing Committee on Public Works

Inquiry into Municipal Waste Management in NSW

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1. Executive Summary

- a) The effectiveness and appropriateness of current municipal waste management is being deleteriously affected due to the impacts of state-sponsored market distortions on the putrescible waste processing, disposal and collection market segments.
- b) There exist numerous impediments for the adoption of best practice methodologies including the formulation and application of levies, local government tendering practices, state government structural issues, the absence of a true understanding of external costs and the market behaviour of the state government's operational corporation, WSN Environmental Solutions.

It is not considered enough incentives are in place to support the adoption of best practice principles eg, there are sufficient “sticks” but few “carrots”.

- c) There exists a significant barrier in optimal planning and service provision. There is a need for better training and information for decision makers in relation to the economics and environmental outcomes of different waste solutions. Currently, there is insufficient:
- objective understanding/knowledge of appropriate resource recovery processes (including Alternative Waste Technologies (AWTs));
  - transparent and sustainable service pricing;
  - measurable and meaningful outcomes/key performance indicators;
  - the establishment and growth of long-term environmental liability provisions; and
  - adherence to the principles of competitive neutrality.
- d) The development of new technology and industries associated with waste management has been retarded by the actions of the NSW Government's operator, WSN. Disposal prices quoted by WSN have decreased by 25% to 35% over the last two years, decreasing the viability of new technologies. Further, WSN has effectively positioned itself as an authority on new technologies whilst promoting those processes that it has been able to negotiate access to (whether or not those processes have an established track record).
- The number of new technology “failures” in recent times highlights the need for unbiased technical validation, economic assessment and environmental impact evaluation. Failure may be through total failure of a technology or failure to be able to meet any realistic operational cost. It is significant that the European experience of improved waste treatment typically involves significantly higher cost than that represented in the case of a number of technologies in Australia.
- e) Harm to the environment can be minimised through a revised incentive/disincentive program/policy, an understanding of the environmental health and safety impacts of emerging techniques, technologies and processes and the development of an understanding of a full suite of environmental impacts and outcomes.

## 2. Discussion

### 2.1 The effectiveness and appropriateness of current municipal waste management

In NSW the government owned waste management company, WSN Environmental Solutions (WSN), owns four of the five putrescible landfill facilities that service the Sydney region. The facilities are old, would not be likely to be approved today as new facilities on environmental grounds, and are operated as low cost repositories with diminishing provision for end-of-life rehabilitation.

More particularly WSN owns 7 of the 8 transfer stations handling putrescible waste for Sydney. The only exception is the Collex Clyde rail packing station which is tied by its conditions of consent to delivery to Woodlawn bioreactor landfill. As such WSN remains the gate keeper controlling the flow of waste into other putrescible waste treatment for Sydney.

During the last two years, WSN has engaged in tendering practices which have had the effect of maintaining effective control of the Sydney Metropolitan Area putrescible waste market. It has tendered at prices with conditions that would not have been justifiable by a commercial operator. By the end of 2005, WSN succeeded in tying itself 70% of the Sydney market.

Market control is also "locked in" for a considerable period by long term contracts limiting opportunities for market reform and innovation.

The Standing Committee should examine the issues involved in government owned waste management services and monopoly or near monopoly contracts as part of its inquiry.

#### Recommendations:

- Waste Management in NSW should be subject to a microeconomic reform process that includes consideration of the roles of the public and private sectors and should develop a framework for the allocation of responsibilities that enshrines a level playing field, competitive neutrality and clear separation of policy makers, regulators and operators.
- Municipal waste management currently operates with local monopolies, either publicly or contracted. Municipal waste management markets should be made more contestable and competitive.

### 2.2 Impediments and incentives to best practice waste management

#### 2.2.1 *Impediments to the achievement of best practice*

##### a) **Levies**

Levies and subsidies are the main economic instruments that have been applied in Australia to deal with waste management issues. Where such measures have been specifically designed to deal with a clearly divided issue, they tend to be more successful. When they are a broad-brush measure to deal with unclear or even misguided objectives, they do not enhance efficiency.

The NSW government has announced that it will more than double the Section 88 Levy (over the next five years) to a level well in excess of externality costs. Further, the levy is based on only one broad measure: waste diversion from landfill. The levy does not recognise the substantial environmental and social benefit that should be pursued as part of an 'eco-precinct' waste management development model. The levy also does not distinguish between outdated and environmentally unsound landfills and state-of-the-art engineered bioreactors. Indeed, modern bioreactors are recognised world-wide as legitimate forms of resource recovery. In NSW, this is not recognised by the levy regime.

In calculating external costs, there must be care in classifying 'like with like'. Old fashioned dry tomb landfills and modern bioreactor landfills involved completely different environmental impacts and risks.

**b) Local government tendering practices**

The weakness of transparent/competitive tendering processes by some Sydney metropolitan councils is seen as a significant disincentive in the municipal waste management market.

Over the last three years there have been a number of occasions where Councils have entered into exclusive arrangements in the absence of a competitive process. Fairfield City Council elected to add very long term provision of kerbside recycling services to the scope of an expression of interest process originally aimed at identifying processing options for municipal waste. The market was never given the opportunity to submit proposals for this separate service stream. Therefore, it can be stated that Council lost its opportunity to assess and evaluate a range of proponents innovations developed over the five years since the recycling service contract had previously been awarded.

Similarly, Blacktown City Council elected to commit its municipal waste tonnages to WSN's UR-3R waste processing facility without a competitive process.

**c) NSW government structural issues**

There currently exists a conflict in role with respect to the ministerial portfolio responsibilities that impact on the municipal waste market. The Minister for the Environment is responsible for the industry regulator (the Department of Environment and Conservation) whilst also being the portfolio minister for the Government's waste operating corporation (WSN).

In recent years, this situation has given rise to industry-wide concerns relating to the potential for inequitable treatment of WSN relative to other marketplace participants. It has also resulted in the Minister defending activities of WSN when a department reporting to the Minister is responsible for enforcement of the rules and any prosecutions.

**d) Public policy and externalities**

Public policy is currently focussed on minimising the weight of waste sent for disposal to landfill and maximising recycling. This focus is reflected in the waste hierarchy philosophy adopted as the primary tenet of public policy. The waste minimisation policy prerogative has not given full consideration to costs/externalities, and pays no attention to the nature of the materials recycled or diverted. Collex submits that a single waste management objective is inappropriate. It should be replaced with a more 'balanced scorecard'.

The goals should be sustainable and efficient resource use, involving optimal waste treatment and management. KPIs should take into account the value of resource recovery, including energy, and toxicity avoided. This involves a recognition that tonnage is a very limited performance indicator. A tonne of paper contaminated by food scraps and glass has nowhere near the recycling value of good quality sorted paper.

Regulators argue that intervention is necessary to correct for the increasing cost of environmental externalities. However, levies will now be increased in NSW far beyond the level of estimated environmental costs for bioreactor landfill facilities. Bioreactors in degenerated sites like Woodlawn are less polluting (and more expensive to operate) and therefore particularly disadvantaged by the current levy arrangements. The levy is much higher than any external costs that might result from their operation. Higher gate fees associated with higher environmental standards, effectively internalise what might have been externalities in the past. The levy does not provide any incentive to improve environmental performance, but could even be considered to penalise it.

**e) NSW state owned corporation conduct**

Over the last four years the state government's operational entity (WSN) has been allowed to:

- increase the volume of low-cost (WSN's own words), low-tech landfill space over and above that assessed in the Wright Report (2000);
- maintain effective monopoly control and reduced the size of the contestable market in municipal waste from 100% in 2003 to 20% in 2006;
- decrease the gate rates for land filling at publicly owned landfills by 20% to 30% for a substantial portion of the market;
- engage in 'facility based' pricing mechanisms which have the effect of minimising market competition and increase incentives for land filling at its facilities.

Of particular concern is WSN's apparent propensity to bid prices below cost and suggest it offers guarantees underwritten by the NSW Government when it appears no such guarantees have been provided. Recent examples of these practices include WSN submissions to the South West Sydney Councils Group and Ryde City Council.

*Recommendations:*

- The NSW Government should move to a sustainable resource use framework for waste management. That is, it should be based on achieving optimal environmental, economic and social outcomes, not simply waste diversion.
- The NSW Waste and Environment levy should be based on KPIs linked to sustainability objectives which reflect environmental benefit, value and cost (including benefit of associated activities) rather than just tonnages diverted.
- With respect to the application of the levy, all transport costs; green house gases emitted or avoided; air, water, land and odour pollution created or avoided; speed of waste stabilisation; degraded site remediation and production of any marketable products such as energy (electricity) or compost and soil conditioners must be taken into account.
- In the upcoming review of the Local Government Act, the requirements for Councils to undertake transparent competitive processes for the provision of municipal waste management services need to be strengthened.
- An independent inquiry should be commissioned to examine WSN marketplace conduct and make recommendations to the NSW Government.
- Portfolio responsibility for WSN to be reassigned (possibly to the Minister for Energy, Utilities and Sustainability).

### 2.3 Best practice planning and provision of services

It is Collex's opinion that the NSW Government's operating corporation, WSN, has distorted Sydney metropolitan municipal services markets, though the aggressive reduction of pricing to secure monopolistic market share. Indeed, it can be demonstrated that gate prices have been decreased by 20 to 30% over the last two years. In this same period, operating costs of the government owned facilities have increased. Therefore it is incongruous that WSN could have exceeded or met budget when its reserves have decreased and expenditures increased. Alarming, it appears that WSN has 'mined' its long term liability provisions to offset recurrent operating expenditures. Provisions were decreased by \$10m in 2003/4 and \$12m in 2004/5. Fiscal irresponsibility aside, this practice has resulted in an insufficient provision being preserved for the cost of government's long term environmental liabilities.

Clearly, the current accumulation of provisions for long term environmental liabilities is insufficient. Further, WSN's current cross-subsidisation of operating costs (utilising these provisions) is only exacerbating this issue and will ultimately lead to the creation of a significant liability requiring state funding.

The issue of sufficiency of these provisions for the long term is amplified by the very substantial odour and leachate management issues experienced at its Eastern Creek landfill.

With respect to recent municipal waste collection and processing/disposal contracts, WSN has tendered prices which are below the costs of service provision. Clearly, this practice is in conflict with the principles of competitive neutrality. Further, it is questionable as to whether minimum service quality standards (let alone best practice service levels) can be sustained in the medium to long term. Finally, WSN's 'below-cost' pricing is causing several companies to re-examine whether or not they will choose to compete for business in the Sydney metropolitan municipal waste market. Clearly, if the Sydney municipal waste market was deemed untenable by service providers, the adoption of best practice principles would not be realised.

*Recommendation:*

- The NSW State Government must review legislation and practice as it applies to WSN to ensure a level playing field, competitive neutrality and clear separation of policy makers, regulators and operators.

#### 2.4 The development of new technologies

The key driver of the introduction of alternative waste technologies (AWT) has been the desire of local government and industry to comply with state policy and its associated waste diversion targets.

In its eagerness to introduce AWT, local government has unfortunately been subjected to several technology failures (eg the Brighstar or SWERF project). In Council's defence, it is apparent that some technology proponents have used local government areas as 'guinea pigs' to trial and then commercialise technologies. This is certainly the industry's opinion with respect to the recent awarding of the South West Sydney Councils' fifteen year contract. In its submission, WSN has proposed to build an "arrow bio" facility to service the four member councils. This technology has only been trialled in Tel Aviv, Israel on a completely different waste stream/composition with considerable government subsidies. Further, it is our understanding that this pilot plant has not been in general operation for the last three years. Consequently, we believe this needs to be regarded as another high risk technology.

It is also known that there have been issues (including a very significant odour problem) during the long drawn out process of commissioning of the UR3R plant, which has been accompanied by disputes over contractual terms and risk sharing. We are not a party to that transaction and accordingly do not know the details. However a genuinely independent inquiry into the contracts and practical operation of that plant may give significant guidance into issues in the industry.

A major 'product' of most AWTs being promoted in the marketplace is compost. However, the presence of contaminants in compost produced from municipal solid waste decrease the potential end-use applications and value of the product. The current European trend is to use such technologies to stabilise and volume reduce municipal waste (strategies particularly relevant in the closer settled European context) or purely for energy recovery. Collex does not believe that this trend will change and is focussing its efforts in relation to MSW on the production of energy (such as the bioreactor) and the production of a compost to rehabilitate mine sites and other degraded lands rather than high value or general/broad acre applications. It is Collex's contention (based on European experience and that of our composting operations in Victoria) that only compost derived from source separated organics is realistically suitable for high value or general/broad acre usage. Our group's success in producing compost from MSW in Egypt depends on very special circumstances. The suitability of technology depends on a consideration of all circumstances.

### *Recommendations*

- The NSW Government should set clearly defined, rigorous and realistic waste management objectives. These objectives should be focused on achieving economically efficient resource use and a broader set of health and environmental objectives based on a systematic consideration of risks, costs and benefits.
- Independent advice be made available to local government to ensure that the choice of technologies should be based on what is most economically efficient (broadly defined to include correcting market failures) with respect to individual elements and opportunities of the waste streams.
- Where high risk technologies are used, government should be careful to ensure the commercial proponents bear the real risk, and that government does not by, legal clauses or simply by force of circumstance, become forced to accept what should be an unacceptable outcome.

### 2.5 Minimising harm to the environment

In solid waste disposal we believe at least four areas of harm to the environment can be considered:

- Recovery of resources (including energy) to reduce environmental burden in use of virgin materials.
- Toxicity of emissions – including both green house issues and products directly toxic to plant and animal life.
- Sterilisation of land – such as digging up otherwise valuable land to make landfills as contrasted to remediation of unrehabilitated mine sites
- Similar burdens related to transport and logistics of waste and recyclables.

### *Recommendations*

- The NSW Government must ensure incentives are geared to addressing and reducing such harm, in an economically and environmentally sustainable way. This first requires a rational and transparent assessment of those harms, and the real cost and alternatives to avoid or cure those harms. We understand there is already a body of work on this within the Department of Environment and Conservation relating to load based licensing which could be publicly made available and used as a base for determining appropriate incentives.

### 3. Conclusion

In our view the biggest hurdle to high quality resource recovery and waste management in NSW is the position and actions of WSN, a government corporation with strong government connections, as effective gatekeeper for the majority of putrescible waste. We believe a restructuring of this organisation, probably involving breakup and privatisation, is required.

The industry needs to continue in its steps in increasing education and knowledge concerning waste management and resource recovery issues. While significant progress has been made, the ongoing developments have clearly recreated this industry, so that it is in truth in its infancy, with significant misinformation and many mistakes still to be made. Caution must therefore be exercised.

As a corollary to this last point, waste management and resource recovery needs to be measured by a “balanced scorecard”, effectively range of indicators, representing in particular value of recyclables and reduction in toxic emissions. A single KPI of tonnes diverted to landfill was a good catch cry, but is capable of being manipulated and is now outdated.