SUBMISSION TO THE PRODUCTIVITY COMMISSION ON WASTE – FEB 2006

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Victoria

INTRODUCTION

Who am I?

I am a paediatrician by way of a day job. I also teach Environmental Medicine to Monash Medical Students. I am indebted to my Year 12 Biology teacher, who taught me to question conventional wisdom. My medical training provides me with the skills to analyse the scientific evidence.

I try to live sustainably, by household management strategies and active support of community organizations. Through organizations such as Gippsland Women's network, I have been involved in considering the social effects of such things as Dairy Deregulation, changes to the Water Market and the effects of Victoria's Food handling Regulations.

I believe it is important to try to put a value on the positive and negative social effects of waste policy. I have no doubt that fighting a toxic waste dump has an important up-side for the local community. There is an enormous sharing of activity. People, who would otherwise have nothing in common, are brought together which may have long-term benefits.

On the other side of the equation, it is likely that coastal development possibilities (for example) and land values generally, would be reduced by proximity to an odouriferous treatment facility.

I am involved with several environmental groups, in particular WRATH or Wellington Residents Against Toxic Hazards. WRATH was formed in response to community concerns about hazardous wastes being accepted for land filling at our local sewerage farm. The opinions herein, are my own and not necessarily those of WRATH. However, my involvement in WRATH has certainly given me an interest in, and some knowledge of, waste issues.

I am also a member of Environment Victoria and took part in their recent survey of supermarkets and their compliance with plastic bag minimisation.

Where are we now?

I am old enough to remember my mother wrapping the household waste in newspaper and putting it out in the small, galvanised steel garbage bin which at other times, doubled as cricket stumps. Our unwrapped bread was delivered daily to the bread bin on the front porch. Milk was delivered at dawn, to the front gate and the washed, empty bottles, put out each day to be collected by the milkman and reused. We trusted our neighbours and left the money out for the milkman and the baker. We also had better childhood iodine levels thanks, apparently to the iodised disinfectants used in the dairy. Every so often, the boy scouts conducted bottle drives and collected beer bottles etc. which were not covered by a container deposit scheme (then in operation for soft drink bottles). In the 1970's, I worked in the local milk bar and well remember the gangs of kids dragging in sacks full of bottles to be sorted into 3c and 5c types. Inevitably, they always arrived at the busiest times, and then anguished at length over which varieties of mixed lollies they would choose to purchase with their hard won cash. Back then, it was also standard practise to take your own pots and casseroles to be filled with take away Chinese meals.

As I recall, we thought our quality of life was pretty good, even though, by today's standards there was less convenience. Perhaps, we could borrow another lesson from back then? I remember collecting Lan Choo tea labels which could be exchanged for a range of goods, from a shop front in the Melbourne CBD. Is it possible that, setting up local collection centres, could also provide a range of goods in exchange for bottles, cans etc? These could be funded from the bottling companies and might include sporting equipment etc for sporting clubs undertaking bottle collections, as well as household goods. This would also allow the stream lining of collection of recyclables. Municipalities could offer to allow existing roadside collectors to set up such collection points or they could be independent businesses, competing for the recylables. I suspect this might lead to greater actual recycles, since I am repeatedly hearing rumours that our local contractor landfills most of the recycling it collects because of traces of food on empty containers.

I note that Lancaster County Council in the UK recommends buying milk in glass milk bottles and always returning them to the shop where they were bought. Clearly it still is possible, in some places! They provide for both glass bottles and aluminium caps to be recycled. The website (www.lancaster.gov.uk) is also a very good example of how Government can intervene positively to help their citizens become more efficient recyclers.

In Germany they now make thinner glass for many bottles, which is more energy efficient to transport and recycle. They also have their

citizens well trained to deposit green, clear and brown glass in different receptacles.
I have taken part with a community group at Mallacoota, sorting their recyclables, at the local tip. After the local council said it was no longer cost effective to run it, the community provided its own labour, and continued the task. The social benefits, in terms of community connectedness, are obviously invaluable, in the true sense of the word.

Costs and benefits

Australia can improve its efficiency in waste management. If Sweden can generate less than half the waste per capita of a US consumer, then Australia can clearly do much, much better. Sweden has a far smaller population than the US, so that supposed economies of scale should dictate the reverse. The Swedish experience should also be applicable to our population density.
US data suggests good progress: they have doubled their recycling rate in the last decade. They have also studied the economic benefits and found major job creation out of recycling.
(www.epa.gov/gov/epaoswer/non-hw/muncpl/faq.htm).

...**From US EPA website**

A report released by the National Recycling Coalition at the end of 2001 offers perhaps the most compelling evidence of how and why recycling makes good economic sense. Simply put, recycling creates jobs and generates valuable revenue for the United States. According to The U.S. Recycling Economic Information Study, more than 56,000 recycling and reuse establishments in the United States employ approximately 1.1million people, generate an annual payroll of $37 billion, and gross $236 billion in annual revenues. According to the report, the number of workers in the recycling industry is comparable to the automobile and truck manufacturing industry and is significantly larger than mining and waste management and disposal industries. In addition, wages for workers in the recycling industry are notably higher than the national average for all industries, according to the report. For additional information on the economic impact of recycling, visit EPA's Jobs Through Recycling Web site.

Government Intervention

In Victoria, Government intervention has a number of inhibitory effects. Intervention of one department may undermine the activities of another. With a policy to minimise landfill, the Victorian Government, quite rightly, was keen to reduce the amount of contaminated soil going to landfill. To this end a committee was established to choose a suitable site and operator to set up and run a soil treatment facility. The Department of Major Projects was keen for pricing to act as an incentive. Unfortunately the site identification process has been fraught and there is, as yet no soil treatment facility. The only destination left in the process, is over 200km from Melbourne which gives rise to concerns about the costs of fuel to transport soils into and back out of, the site (not to mention greenhouse gas effects). Meanwhile, EPA allows on-site clean ups in Melbourne, (with burial under a sports ground etc.), which prevents the market from supporting a price which would make distant treatment viable.

Food handling legislation prevents lots of good avoidance measures and is not based on good science. As a knee-jerk reaction to a food poisoning incident, Victoria implemented regulations that caused a huge amount of community grief, and guided by the then ANZFSA, chose the most draconian of about 4 possible strategies. This was based on food poisoning experiences, reported by Tasmanians, in response to a questionnaire. This yielded 90 cases, only one of which was actually microbiologically proven, since most did not even see a doctor. This figure 0f 90 Tasmanians, was then extrapolated to suggest 4 – 5 million Australians affected each year. This led to hysterical headlines saying ***"One quarter of the population poisoned by contaminated foods, each year***" A straw poll of 2 paediatricians, a physician and 2 GP's all found the statistic laughable. Despite ANZFSA admitting that it's data was fuzzy, Victoria leapt into the most expensive and extreme option, because it was said to conform with WTO sanitary and phytosanitary standards. Interestingly, other states have not followed suit. I found it refreshing, to cross the border into NSW and be given a cleaned, glass, fruit juice bottle with milk in it, to take to our motel room for tea and coffee. Amazingly, neither of us suffered any dire intestinal consequences.

I used to be able to take my own china mug into cafes to get a take away, cappuccino. Now I am doomed to a polystyrene cup to comply with food safety standards. One bureaucrat even told a local B&B owner that she could not serve jam, made with fruit from her own trees. They wisely intoned that her free-range chooks might poop on

the fruit, rendering it non-compliant with food standards. Again, do they not realise that the hours of cooking in jam making, are far longer than necessary for complete sterilisation!!!

Thus, a bit of legislation accompanied by a fair bit of scare mongering has no doubt vastly increased Victoria's waste food containers, food packaging and food thrown out because of fear of germs. I t has likely also increased the empty, household, chemical containers, after anxious housewives have used the contents to kill household germs. I have even been asked by a young mother of a 9-month-old child, when it would be safe to start feeding her home cooked food, which may not be entirely sterile?

There is a good opportunity to compare the efficiency of different states' food safety rules and waste outcomes, before other states make the potentially unfortunate move to Victoria's standards.

Product Stewardship

In Germany companies pay for a Green Dot, which costs more, the more packaging they use. Similarly in South Australia drink containers are returnable. Discerning shoppers will choose products that give better environmental outcomes, even if the cost is passed on to the consumer.

Australians are familiar with the star system for energy and now water efficiency of white goods etc. A system which gave a star rating to the resource use and reclyclability of the product and/or it's packaging would be a good way to remind people about waste prevention measures.

Negative Externalities and compost

"Properly constructed and managed landfills" as mentioned in the Issues Paper, are an important first principle, alas, not always taken seriously. Our local, water authority, in a Works Approval application, makes it clear that it is not economically viable to build the high tech facility originally promised to our community. The fully enclosed composting facility is now a shed open on one side, for contaminated soils, surrounded by an outdoor composting experiment. This begs questions about the propriety of the construction and management. Here the problem seems to be that the government wants a state of the art facility for bargain basement prices…and it simply is not possible. In this situation, there is a tried and true, fallback procedure. Put the problem "out of sight and out of mind" even if, evolving environmental awareness makes the site unsuitable. If it is far enough away from a major population centre and preferably not in a marginal electorate, it is usually a safe bet that shortcuts can be taken.

The same Organisation, at its Dutson Downs facility, has for a number of years placed chromium-contaminated, leather processing, waste in cells, which were unlined. We believe that community comment, did eventually lead to the trenches being lined with plastic. Previously what existed was not everyones' idea of "*properly constructed"*.

The licence granted by the Victorian EPA for the waste treatment activities at Dutson Downs, included a condition that an Environment Management plan be drawn up. This EMP is supposed to document how wastes would be managed at the site. We thought it a little odd that there was no apparent, document explaining how they would manage the waste, until two years after the licence was granted. Happily this has now been rectified, but our organization (WRATH) entered into correspondence with the EPA over this issue.

At Dutson Downs, they are only slowly dealing with complaints by locals, about odour. This has been an issue for over 30 years. Much of the problem is from putrescible waste such as milk solids, etc., dumped into a swamp that is dignified by the appellation of "The Cardboard Pond"

Much of this material is a good source of nitrogen and phosphate. It would make excellent sense to compost this with garden clippings etc. Unfortunately there is a plan to magic the contaminants out of soil by mixing it with compost and hoping like hell, that the end result will be less toxic than the original soil.
It seems a terrible pity to turn clean, green, waste, into dodgy compost. **In a world where oil prices are likely to keep on rising, petrochemical based fertilizers will be unaffordable, so that sensible composting will become increasingly important**.
In theory organisms exist which can remove hydrocarbon residues from the soil. These work quite well for short chain hydrocarbons but less well as the chain length or complexity of the molecules, increases. Composting does not deal with heavy metals. There is some evidence that some organisms may concentrate heavy metals into plants grown using the affected compost. The mechanism may be similar to the way in which Nitrogen fixing bacteria associated with legumes, or certain fungi, can improve soil or enhance plant growth. In theory this process could be used to remove harmful contaminants from soil, by destroying the contaminated crops after they have taken up the salt or metal, from the land.. The problem is that using "waste-treatment compost" to fertilize food or forage crops, could concentrate harmful elements in the human food chain.
In short, compost may be a two edged sword and should not be seen as the panacea for all evils.