

Submission No 8 for the INQUIRY INTO RECYCLING AND WASTE MANAGEMENT.

I was present during the inquiry and have the following questions that to ask and statements to make.

- I think most of the problems we have with our recycling and waste can be solved easily. We need to encourage/force everyone to sort at the source and not to mix up our waste. All the solutions to the problems are dealing with mixed waste. This can be avoided.
- 2012 an inquiry was held by the Department of Sustainability Environment, Water, Population and Communities. A report was produced called CONSTRUCTION AND DEMOLITION WASTE GUIDE - RECYCLING AND RE-USE ACROSS THE SUPPLY CHAIN. A lot of ideas were recommended for waste from construction sites including Plasterboard , fiber sheet, pvc pipe and wood off cuts. There were system that appeared to be in place and viable. I am involved in construction at a commercial level and I don't see any evidence of that any of these ideas are in place. Ie - CSR Gyprock had a system where clean off cuts could be made available at site and they for a small fee be picked up and then be totally recycled back into there board. As I have stated in my earlier submissions this has all been researched before so what we need to do is find out why they have fallen by the way side. Building sites still do little sorting at the source and consequently deliver the mixed problem to then be resorted. Even if there are 10 different categories at every site its got to be a better system. Regulation and reward systems can make this happen.
- The only way power to waste can be effective in the big picture i think is to use if for burnable waste that is impractical to recycle. This could be low grade plastics both domestic and commercial for example. I propose that if this waste is basically free of hard contaminants that it locally (within the municipality) be highly compacted or pressed into basically logs say 100 mm x 100 mm pallet length. These stacked on a pallet may weigh up to 500 kgs each. They could be wrapped and stored efficiently. When enough pallets have been formed then transported to where ever solid fuel can be used. The benefit with this is that 10 times as much could be transported at the one time over loosely compacted loads. Fire risk during storage would be very low because of its density. Compactors would be easy to design for this as the technology is readily available in the market. The supply feeding the compactor does rely on total sorting at the source at home and industry which I will cover below.
- The next step with the solid fuel logs would be to design a small waste to energy unit that could be fired by this product. I propose that the brief to a designer is that it be the same dimensions as a 40 foot container when transported. Feed the logs in one end and get heat or electricity out the other. Now this seams a difficult to achieve but I plan to put the challenge be put to our best designers and or Universities to use the brief and design the middle portion. Designers love a challenge and I would love the chance to be involved in this my self. The reason for the container size is that they could be made in a factory and easily transported to sites where required. Along with the compactor which could be the size of a 20 foot container we would

now have the chance to process our low grade burnable waste with out the effects of a lot of transporting. We would be on the way to “owning our own waste”. Naturally the EPA would need to be associated with the design to address emissions. I think the State should own and control the idea as if it can be worked out it could be popular all over the world. Imagine third world countries where pollution is every where. We could run these in areas encouraging locals to pick up the waste and we pay them by the bag full. This makes their waste worth money to them and cleans up the area. When an area is clean simply move it to the next area. I think this committee should take this challenge by funding a research program sooner rather than later.

- Chemical waste is an area that needs to be investigated properly. May be it already is. We need to quantify volumes and what they are. To do this I think we need to start at the primary source which is the companies that supply the new raw chemical to industry. From here we can get a basic idea of quantity. The supply companies can advise who receives it then ask them what they do with it. They can tell us what their waste was from there production. Now we can put together a total manuscript for the whole state. Ei – Ask oil companies which and how many garages they supply engine oil too. Now we know the quantities that will end up as waste assuming cars don't burn much oil these days. I work on the equation that what goes into a factory must come out as either product or waste. We can ask/force companies to do regular manifests for their normal production that align with what goes in. Now we know who's receiving and using the new chemicals which allows us to do regular checks on safe work methods etc. Also we now can insist on knowing where they off load it too. If we know the total amount of waste chemical produced then we can compare this to the approved waste chemical company manifests. The discrepancy can generally represent the amount of illegal chemicals deposited of .
- Another issue with the waste chemical situation is that there appears to not be enough capacity to process it. This amounts to stock piling. Questions need to be asked why this is just a recent problem. Are there fewer processor now or was it being dumped perhaps in the bush or our parklands. Are all waste chemical reprocessed into something that is re useable. We need to find out what these chemicals are used for. Also more processing plants need to be built if we don't have enough capacity.
- House hold waste needs to achieve a level where separation becomes the normal practice. With charts and labels even children can sort waste in maybe 10 different piles. If a yellow bin could be divided internally into 4 compartments and the truck have a system that can keep it separated say then we are on the way. Clean cardboard , glass , aluminium cans, and top quality plastic containers could bagged separately and dropped off at a very local recourse centre thats located on the way to the shops. Low grade plastic could be identified by the charts and bagged in specially identified bags to keep it together. A pilot programme needs to be funded and set up for this. We need to basically sit down and look at exactly what is in our bins say over a month then work out what is the most efficient way to process it. There may be 100 different items that need to be considered here.

- One problem that needs to be looked at is Residential hard waste. This being things like household furniture etc. Big bulky bits that are not easy to strip down. I don't have any easy solution for this other than get the tools out and break it down to the basic components.
- I think Industry and commercial waste is simpler to keep separated at the source as they have a lot of the same product. They should be asked/made to supply a list of their waste along with a plan of how its to be handled responsibly. There may be a lot of questions at the start but if we develop the solutions on the way we can all work together.

Ken Woodward

