Monday, 2 November 2015

VWMA Submission – E- waste Discussion paper

Question 1

The definition of the Government's e-waste is clear – but it is too broad in this instance. The Europeans under the WEEE schemed separate electronic and electrical wastes. The VWMA does not see any benefit in including low value electrical items (that are likely composed of more plastic than anything) in this landfill ban scheme. All these goods are made overseas and are made cheaply placing their recovery at a great disadvantage because they are

a) Disposable as far as the consumers is concerned
b) Have very little residual value once they have outlived their original use – as re-use items, ie mostly plastic
c) Are not designed to be repaired

The paper's definition of e-waste is based on an assumption that all e-waste (their definition) is comprised of the same component materials and therefore can be recovered using the same technical processes. This assumption is wrong and apart from mechanical crushing, the recovery of batteries for example is vastly different to the recovery of metals from electrical equipment.

The inclusion of all electrical and electronic equipment in the definition will lead to a false assumption by consumers that all goods are recyclable with the likely perverse outcome that these materials will find their way into the household recycling bins thus contaminating the comingled stream. This is already evident with polystyrene finding its way into household recycling bins.

Question 3

The key question is how are Governments going to prevent households from disposing of (small) electrical equipment through the municipal waste/recycling services? Are waste contractors or landfills going to be held responsible for material they have picked up that has been hidden in waste/recycling bins?

Question 4

If material is disposed of in best practice landfills (as required by the EPA, there should not any environmental or human health impacts as modern day landfills catch and treat leachate.

Question 5

Potential positive impacts are maybe future investment in recovery technologies in Victoria/Australia

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Potential negative impacts are a collapse of existing recovery operators through a glut of material driving down prices for material, illegal dumping of material including by households on nature strips etc.
The problems of exporting environmental problems to low labour cost countries (which generally have poor environmental and OHS standards as well)

Question 6
The key reasons for potentially not recovering some types of e-waste would be:

The energy required to disassemble equipment to recover components is greater than what the materials contain

Potential to expose workers to OHS issues through mechanical breaking up of the components

The high cost of labour in Australia precluding anything (at this point) other than collection and export.

Questions 7 & 8

The key issues with e-waste recycling market are apart the scale of material are the lack of post processing facilities in Australia, (for example copper smelters), and transportation issues (from anywhere outside metropolitan areas.) Without the full cycle of processing (collection, processing (mnechanical shredding) and post processing (smelting), Australia faces signifcant barriers to achieving significant improvement of e-waste recycling

Question 9

This question is value laden and clearly designed to elicit a positive response. It lacks scientific creditability. There is no supporting information to achieve any worthwhile answer.

Most (if not all), electrical and electronic equipment are now made in low labour cost countries because consumers have voted with their wallets, a preference for cheaper items despite the fact that they may have a limited life due to the low cost/quality of their materials. Hence they have little residual economic value once they have served their primary purpose.

Private investment in E-waste recycling in Australia is likely only ever be successful when it is judged on its economic outcomes, environmental outcomes being a side benefit. Governments might be able to afford to run loss making entreprises which if they can inlcude natural capital accounting, show an overall profit.

Question 11

Even with all the envrionmental awareness programs in the world convincing people that not disposing of unwanted electrical and electronic items is the right thing to do, a ban on e-waste to landfill is unlikely to achieve a viable sustainable recycling industry. Banning e-waste from landfill without systems in place to capture and recover items of vaue will

only ultimately lead to a failed scheme. Victoria's previous Recycling/resource recovery strategy "Towards Zero Waste" which identified both waste items to be targeted and recovery rates was unsuccessful because it focused on supply side rather than demand led strategies. The E-waste discussion paper falls into the same trap of considering only the supply of material, relying on the altruism of the community (to do the right thing) and industry (to make investments). This is a dangerous supposition to base a policy decision on.

The community will eventually discard unwanted items (maybe after a long period of storage) – and human behaviour being what it is, will quickly find a way to get rid of material whether legally or illegally.

Question 12

Criteria to be established should be

The costs of administering/enforcing an E-waste ban in Victoria vs the value of materials recovered.

The economics of full processing in Australia, ie what is the payback for investors

The environmental sustainability of sending material off shore to be recycled and whether that can be monitored.

Questions 13, 14 and 15

The primary consideration for banning e-waste from landfill should be whether there is a similar appetite in other Australian States and Territories to also ban e-waste to landfill. Until a nationwide ban is in place, implementation in Victoria should be phased. Current experience has demonstrated with Victoria's (and NSW) landfill levies that wastes will flow to other states (eg NSW country and Queensland) where there are no levies.

The strength of the current recycling market also needs to be taken into consideration with any ban. As was shown with the National Computer Monitor and TV recycling scheme, an oversupply of material and a lack of capability led to the collapse of several recyclers (and these were low cost operations often relying on disabled labour). An immediate ban is likely to lead to significant stockpiles of material with no processing capability.

Question 16

The VWMA supports the key principle a scheme whose benefits outweighs the costs. It should be this principle alongside minimising the regulatory burden on industry that should inform the timing of any e-waste ban. A Regulatory Impact Statement needs to be conducted of any policy that seeks to ban e-waste to landfill.

Question 17

A business case needs to be included in any determination about how to achieve a landfill ban. This should include whether Victoria (or indeed Australia) should focus on collection and the export of semi processed material to processors in other countries or whether investment in processing technologies such as Hydrometallurgical and Pyro metallurgical processes as opposed to not doing anything.

Question19 and 20

Previous questions have covered the unintended consequences of an e-waste ban which are likely to be illegal dumping, export to countries in contravention of the Basle Convention or storage like waste tyres. As waste tyres have shown as an example, storage and stockpiling occurred without any regulation of the practise. Compliance and enforcement will be time consuming and costly and unlikely to achieve any great reduction in the practice. As earlier stated, waste contractors and landfills should not be the target of enforcement action unless they are actively seeking to benefit from the ban. They will most likely be the unwitting receivers of material that others have tried to hide.

Question 21

The VWMA would like to draw the committee's attention to the following paper:

Metal Extraction Processes for Electronic Waste and Existing Industrial Routes: A Review and Australian Perspective
Abdul Khaliq, Muhammad Akbar Rhamdhani *, Geoffrey Brooks and Syed Masood

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