The controversy around the definition of waste

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Why define waste?

- To regulate waste management
- Control potential impacts of waste on environment
- Control potential impacts of waste on human health
The definition of waste has a significant effect on the implementation of the Act.

Clear distinction needed between waste and non-waste to clarify the scope of the Act.

Criminal liability depends on whether or not a substance falls within the legal definition of waste.

Prosecutions for violations of waste management regulations are decided on the interpretation of the definition of waste.
Ongoing debates

- European Union
- Singapore
- New Zealand
- Taiwan
- United States of America
- South Africa
What are the options?

• Broad definition
  - All-encompassing definition
  - Environmental protection
  - Hampering implementation of the waste hierarchy
  - Examples – EU, USA, RSA

• Narrow definition
  - Limited to what is finally disposed
  - Low environmental protection
  - Waste minimisation is not actively pursued
  - Example – New Zealand

• Classify waste into broad types instead of definition
  - Define renewable resources
  - Control non-renewable resource disposal
  - Alternative legislation required to protect the environment
  - Example - Taiwan
Broad definition of waste

• **NEM: Waste Act 59 of 2008**

Waste means any substance; whether or not that substance can be reduced, re-used, recycled and recovered –
- That is *surplus, unwanted*, rejected, discarded, abandoned or disposed of;
- Which the generator has no further use of for the purpose of production;
- That must be treated or disposed of; or
- That is identified as a waste by the Minister and includes waste generated by the mining, medical or other sector, but
- A *by-product* is not considered waste; and
- Any portion of waste, once re-used, recycled and recovered, **ceases to be waste.**
Problems with broad definition

- Different interpretations
  - Who decides on what is surplus or unwanted?
  - Who decides on whether or not there is a further use or purpose for material?
  - What happens in case of differences of opinion?

- Bureaucratic processes
  - Licences for listed activities
    - Administrative burden on government and waste managers
  - Classification of waste streams

- Hampering implementation of waste hierarchy
  - Industrial waste exchange especially problematic
Interpretations

• When does waste cease to be waste?
  - Once re-used, recycled and recovered
    • At what stage in the process?
    • What about industrial waste that went through i.e. a metal recovery process?

• What is a by-product
  - A by-product is produced as part of a process that is primarily intended to produce another substance or product and that has the characteristics of an equivalent virgin product or material
    • How will this be determined?
    • Yet another burden of proof on the producer?
Narrow definition

- Narrow definition
  - Any material that is unwanted and/or unvalued \textit{and} discarded or discharged.

- Implications
  - Waste is recognised as renewable resource
  - Support implementation of waste hierarchy
  - Waste minimisation is not actively pursued
  - Undermine environmental protection
Current waste management model adopted for RSA

Starting assumption:
Everything = 'Waste'

- Does waste have reuse potential?
  - Yes → Does market for waste reuse exist?
    - Yes → Is waste hazardous?
      - Yes → Can waste be treated to enable reuse?
        - Yes → Reuse / recycling
        - No → Is the cost and effort to treat worthwhile?
          - Yes → Treatment and/or disposal
          - No → Treatment and/or disposal
    - No → Reuse / recycling
- No → Treatment and/or disposal
DEA solution to interpretation

- Debate on definition is closed
- Waste Act will not be revised in the short term
- DEA will propose an interpretation of the definition to ensure uniformity in interpretation
- Draft interpretation will be published in Government Gazette for public comment
Renewable Resource Model

- Irrespective of definition and interpretation there will be a trade-off between protection and re-use
- Shift towards reuse will require a change in governance model
International legal approach to waste recovery

- Waste stream specific legislation
  - Electronic Waste Recycling Act
  - Beverage Container Recycling Act
  - Computer Recycling Act
  - Cell Phone Recycling Act
- Strong government regulation is not advised
- Waste re-use typically come down to
  - Economics
  - Return on effort
- Extended producer responsibility can be applied irrespective of definition of waste if linked to pollution potential
Conclusions

• A clear definition of waste is imperative to implementation of the waste hierarchy
• Waste hierarchy is internationally accepted
• There is no agreed definition for waste to facilitate implementation of hierarchy
• The debate on the definition of waste is far from concluded
• Broad definitions create a minefield of regulatory requirements and bureaucratic processes
• Broad definitions allows for legislative control over all aspects of the hierarchy
• Broad definitions may act as disincentives to implementation of the hierarchy
Conclusions

- Viewing material as renewable resource may provide a good alternative to promote waste re-use.
- Regulation of resource use extended to renewable resources will favour re-use and recycling initiatives and give due regard to virgin resource conservation.
- A shift in focus away from waste management towards renewable resource use and recovery is therefore highly desirable.
Acknowledgement

This presentation is based on the paper:

Defining waste in South Africa: Moving beyond the age of ‘waste’
by Suzan Oelofse and Linda Godfrey