#### **Basic Purchasing Guidelines for ZW**

(Note: the italics explains why the information that is presented is important)

Certain products and processes have to be excluded, changed or alternatives used, to ensure that our targets are met. It also implies that no waste will go to an incinerator.



Some key challenges include designing out plastic packaging, and plastic products that may be thrown away; toxic chemicals and solvents; and energy and water saving.

All potential products should be checked against the following:

i) How are the products packaged? in bulk or single portions / pieces?

(bulk packaging uses far less packaging material than single portions - also, there is much wastage, as people selling these products, takeaway chips, for example, automatically put in 4 or 5 salt packets and a few sauce ones in with the packet of chips - much of which goes to waste - the alternative, bulk dispensing, saves large amounts.)

ii) What is the packaging made of: cloth; paper; cardboard; glass; plastic; other - specify

(cloth is best if it is cotton or other natural fibre, ideally non-bleached or dyed - bleaches often contain chlorine, a toxic product, and also can contribute to cancer causing emissions; glass is comparatively benign - sand and heat makes glass; paper and cardboard are more acceptable than some other packaging, as not only is it possible to recycle most of it, but even when the fibres are too short for recycling purposes, it can be used as raw material for paper pulp based products, etc and will biodegrade; plastic is a key problem - see the Plastics factsheet - plastic comes from oil and coal, both unsustainable and non-renewable resources; they are subsidised heavily, as the external costs of their environmental, health and social impact are not included in the price; also, to recycle plastic properly, we will need about 27 different types of bins to sort it correctly, and even then, facilities don't exist for recycling most of them at all in our country; also, plastic degrades substantially every time you recycle it, so after one or two rounds, it is useless; plastics also last for hundreds of years in the landfills, and contribute to toxic leachate which will eventually poison the groundwater, so we are creating problems for ourselves and future generations)

- iii) can the product be ordered without any packaging at all?
- iv) Can the packaging be returned for re-use?
- v) what percentage of the packaging is recycled content?

(recycled content can also be misleading - if the "recycling" was done before the product was used by a consumer, then it is called pre-consumer recycling, if after consumer use, it is called post-consumer recycling; if the recycled content is post-consumer, then it is better, as simply putting scraps back into machines at the factory is not really recycling - also, the term "recyclable" is misleading - nuclear waste is also theoretically "recyclable" but it is hardly ever done - "recyclable" does not imply that it WILL be recycled)

vi) does the product contain chemicals? if so, which, and are they considered toxic?

(Chemicals are a big problem - there are over 700 000 chemical compounds, but safety information sheets on only a few thousand, and "cross toxicity" (when two or more chemicals meet or mix) safety sheets on only a few hundred. Not only do we not know what any chemical may do to us, we also do not know what will happen when we are exposed to two or more - and we are exposed to literally hundreds of chemicals everyday! So, an important question – while we may have allowed chemicals into our homes, many have been proven, or are suspected of, being very harmful indeed)

vii) is the chemical biodegradable? how is this proven? is the biodegradability organic or inorganic?

(Biodegradability is simply what happens when a product breaks down in nature - the problem with some products, is that they either breakdown into simply smaller versions of what they are (like photodegradable plastics) or do not breakdown into their natural components, and remain harmful. Organic degradability is the one to push for)

viii) will the product be able to be: re-used; recycled; composted; disposed safely

(first prize: re-use again and again, as many times as possible - that is why our first choice should always be things that we use, and maybe wash in between each use - so metal and wooden spoons are far preferable to plastic, and biodegradable spoons still better than plastic, as they are made of starch. Recycling is allowable for some products - see above - composting is a good thing, as food resources are not lost to the landfill. Disposal is a sign of failure)

ix) what volume of the purchase is actually the usable ingredient?

(often, the active ingredient is only a small portion of the product, and the rest is often water, for example - so, why should we be transporting water at product prices, especially if it can be avoided?)

- x) how can the disposable portion be replaced or excluded?
- x) what percentage of the product is recycled content?
- xi) what percentage of the product is post-consumer recycled content?
- *xii)* is the production of the product energy intensive (*e.g. all aluminium is very energy intensive*)
- xiii) is the production of the product water intensive?

(bleaching and dyes are also an issue - all water is precious, so it is in our interest to make sure that nasty chemicals and colourants do not enter the water in the first place. Dyes are very hard to remove from water, and although the water may look clear, it can still contain many toxics components)

xiv) is the product adequately labelled?

(we need to know the ingredients, especially for food, as people can be allergic to all kinds of things... it also can make us better consumers, as we can then choose products that have either less or no chemicals, which our bodies were not designed to handle, or choose less toxic chemicals, for example, or those that do not contain Genetically Modified Organisms – GMO's)

(This document built upon the fine work done by Earthlife Africa at the World Summit on Sustainable Development 2002)

# What is the Institute for Zero Waste in Africa?

## **Our Mission Statement**

Working towards a world without waste through public education and practical application of Zero Waste principles.

#### **Charter Principles**

- 1. Redesign products and methods of production to eliminate waste by mimicking natural processes and developing closed-loops
- **2.** Convert waste to resources for the benefits of local production and the creation of a healthy and sustainable society.
- **3.** Resist incineration and land filling in order to promote innovation in resource conservation and methods of production
- 4. Collaborate with others with common interests worldwide

## **Objectives**

- 1. To advance the education of the public by all appropriate communication means and through supporting the elimination of waste and the associated health impacts.
- 2. To promote and fund appropriate research for the public benefit, including education
- 3. To promote the effectiveness of other Zero Waste initiatives
- To promote the principles of waste avoidance and minimisation, re-use, repair, recycling and composting, through sustainable resource management in accordance with best environmental options.

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