BIODEGRADABILITY IS DESTRUCTIVE TO THE PLASTICS RECYCLING INDUSTRY

The Federation's position is that it does not support biodegradable polymer products (such as those that have additives added that cause the product to break down over time) in the context of the preferred international waste management hierarchy.

We go so far as to suggest that brand owners and retailers are quite definitely worsening the opportunities for job creation and also poverty alleviation, and may not have properly considered the consequences of their actions, beyond apparently trying to alleviate landfill and litter problems and remove the apparent permanent menace of plastics thrown away after use.

Take the example of the well known company that has well established schemes at schools to promote litter abatement through collection activities that end up in product recycling. They offer financial prizes and incentives to the schools that achieve the best collection rates for recycling. This is good stuff. The same company now makes their own brand's packaging biodegradable. This means the packaging product can no longer be recycled as it has been. The recyclers dare not include the bio-degradable packaging in their recycle plants for fear of contamination of the polymer they produce for technical products. In Gauteng alone one recycler was recycling 40 tons per month of polyethylene sheet packaging into builder's product (sheet and piping). This PE material will now not be recycled by this company.

Despite claims by the suppliers of biodegradable additives that biodegradable polymer products can be recycled, it is not that simple. If the waste sheet is not marked as biodegradable then it will negatively affect the recycle polymer performance and contaminate the whole batch. This is happening right now. Recyclers receive mixed bales of polyethylene sheeting / bags from collectors. If there are some biodegradable bags in this bale and they are not spotted – they will end up in the recycle polymer and contaminate it. To counter the biodegradable material, very expensive process stabilizers need to be added into the recycle process – at very low levels – that require …….. metric type equipment which is costly. In addition, some independent research is virtually unstoppable and especially when it is in an advanced stage.

The international waste management hierarchy is "reduce / reuse / recycle / recover / landfill". Where the amount of packaging cannot be reduced (for example the simple carrier bag or bread bag) and reuse is limited – then recycling is paramount. The South African Government, through various Acts or regulations (Polokwane / NEMA / Waste Management Bill, etc) is moving to collection of recyclable materials and especially post consumer. Collections of

BIODEGRADABILITY IS DESTRUCTIVE TO THE PLASTICS RECYCLING INDUSTRY

industrial and commercial waste material are well in hand. It is post consumer waste that ends up in landfill. Of this, plastic is a very small component and being easy to compress and being lightweight is not a major problem. (Often waste plastic packaging in sheet / bag form even helps to stabilize the landfill).

Municipal projects are underway to collect the post consumer recyclables, both via residential kerbside collection and buy-back centres (BBC's). Having biodegradable material in these streams flies directly in the face of recycle initiatives and poverty alleviation projects.

The Federation acknowledges that biodegradability can be beneficial for garbage bags that end up in landfill, and also that it can be beneficial for dealing with land-side litter and especially where municipal waste collection is minimal. But selling "biodegradability / oxobiodegradability / compostibility" only on the litter solution is not good enough. South Africa, at municipal level, is moving into a new and exciting waste management adventure – which must not be negatively affected by the collected plastic material then being unsuitable for recycling.

In fact biodegradability can be a recipe for disaster in the recycling industry. South Africa, like the rest of the world, needs to conserve resources and minimize negative effects of climate change. Recycling extends the life of resources and plastic polymers can be repeatedly recycled saving precious oil and coal reserves. Even when waste plastic is used for energy recovery, it helps preserve resources. Biodegradability disallows resource preservation. Remember that plastics do not litter. People do. So dealing with the litter through biodegradability is not the solution. Educating people not to litter, municipal waste recyclables collection being effected and expanding the Buy Back Centre fabric is more the solution. We need to focus more on resource preservation, waste management, job creation, recycle industry preservation and growth, poverty alleviation and anti-litter education (and not biodegradability.)

Biodegradability as a litter or landfill growth solution can be likened to a "drunken man using a lamp post for support rather than for illumination".

D Hughes
Executive Director
July 2009