

groundWork

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The Waste Management Bill

In nature there is no waste. The detritus from each organism becomes the input to other organisms, in a never-ending cycle. Even though we have all become used to the idea that it is inevitable and that there is very little that can be done about it, waste is, in fact, a very modern concept. Throughout the world people today are beginning to understand that:

Waste is new - it has not always existed

Waste is not inevitable - we don't have to have waste

While waste is a challenge, it can be successfully addressed

But in order to address waste in the most sustainable way, we need law that approaches waste in a new and innovative way. We don't think that the Bill does this, and feel that it neglects to effectively address the following issues:

The Zero Waste concept is not integral to the Bill

Incineration is not decisively rejected

The life cycle analysis and full cost accounting concepts are not incorporated

Hazardous waste is not adequately addressed

Residue deposits and stockpiles (mine dumps) are not dealt with

Salvaging and salvagers are not recognised

There is no road-map taking us towards a waste-free society

Health Care Waste is not specifically addressed

No Burn!

groundWork rejects incineration as a waste management strategy. There are various governments worldwide that have directly banned the incineration of waste or have actively discouraged this practice, and we believe that South Africa should do so too.

Incineration and other “burn” technologies as methods for waste disposal, waste-to-energy plants and incineration in general are processes that cause negative ecological and health impacts. The Bill should forbid these. Our reasons for rejecting incineration are:

- All the “burn” technologies result in the release of dioxins and furans (dangerous, cancer-causing chemicals) into the atmosphere. Heavy metals such as mercury are also released in many cases. To allow such technologies runs counter to the constitutional right citizens have to an environment that is not harmful to health (Section 24 of the Constitution).

Dioxins are Persistent Organic Pollutants (POPs). Dioxins accumulate in the body, and give rise to cancers, endocrine disturbances, birth defects and infertility. Even though they are very poisonous, no-one in Africa has the ability to test for dioxins.

- Claims by prospective operators of incinerators and cement kilns that they can contain the emissions to ‘safe’ levels must be rejected, since these substances accumulate in the environment over time.
- Burn technologies encourage the destruction of valuable waste resources that should be retrieved.
- In recognition of the danger that is posed by incineration, many countries have imposed bans and moratoria on incineration.

The Stockholm Convention states:

Polychlorinated dibenzo-p-dioxins and dibenzofurans, hexachlorobenzene and polychlorinated biphenyls are unintentionally formed and released from thermal processes involving organic matter and chlorine as a result of incomplete combustion or chemical reactions. Waste incinerators, including co-incinerators of municipal, hazardous or medical waste or of sewage sludge, and cement kilns firing hazardous waste have the potential for comparatively high formation and release of these chemicals to the environment:

What we support in the Bill:

We are supportive of the following key critical components of the Bill, which we would like strongly to recommend the DEAT keeps within the Bill and improves upon:

- The development of Standards;
- The development of a Waste Information System;
- The development of a National Waste Management Strategy;
- The identification of Priority Waste;
- The inclusion of mining waste as hazardous waste, although we strongly recommend it be included in a separate section due to the magnitude of the problem
- The inclusion of contaminated lands;
- The inclusion of a licensing process.

The mysteries of LCAs and FCAs

Also known as cradle-to-grave (or, more recently, cradle-to-cradle) assessment, a **Life Cycle Analysis (LCA)** is a comprehensive examination of the environmental and economic effects of a product at every stage of its existence, from production to disposal and beyond. LCA helps to place the assessment of the environmental costs and benefits of these various options, and the development of appropriate and practical waste management policies, on a sound and objective basis. For example, an LCA would show that it takes far more energy to make a tyre than is recovered by burning it.

Full Cost Accounting is an accounting method that seeks to identify, quantify and allocate all costs associated with a process or product, including environmental and other social costs. It typically includes direct costs, hidden costs, contingent liability costs and other, less tangible costs. The term may be used to refer to full private or bottom-line costs to an enterprise, which is common, or include the full social costs including externalities that are difficult to quantify. It is the second understanding of the term that groundWork believes should be used. For example, what is the cost to society of fisheries that have been contaminated by heavy metal releases into the water?

Salvaging - a necessary evil

Although DEAT has failed to recognise the fact of salvagers in the Bill, a recent study conducted by the International Labour Organisation (ILO) shows that both adults and children scavengers exist on landfills throughout the country. Salvagers are a vital component of the recycling process - without them very little recycling would occur, and would be very expensive. A lack of recognition of salvagers, however, means that they are vulnerable to exploitation. The Bill should regulate salvaging, making it possible to draw salvagers, who hold a wealth of information with regard to recyclable material, into viable and sustainable recycling initiatives.

The Polokwane Declaration

The **Polokwane Declaration** is an initiative that was endorsed by the Ministry for Environmental Affairs and Tourism, under the auspices of the Deputy Minister. The Polokwane Declaration, signed in 2001, provides South Africa with targets and timeframes for waste reduction, zero waste and recycling.

In the Polokwane Declaration there is a commitment from the state to move towards "Zero Waste", but the concepts that are required for the country to meet the undertakings of the Declaration are disappointingly absent from the Bill.

The Waste Hierarchy

The Waste Hierarchy refers to the "3Rs" - Reduce, Re-use and Recycle - of modern waste management strategy. A fourth "R" has recently been added - Re-think. This suggests that the present system may have fundamental flaws and that in order to achieve an effective system of waste management we may need to look at waste in a completely new way.

The point of the hierarchy is to remind people that the reduction of waste is the most desirable waste management tool, followed by Re-use and Recycle. Burning up a thing, even if it is for energy, or throwing a thing away into a landfill, are wasteful and unsustainable practices - but are regarded as completely normal in terms of the Bill.

What is Zero Waste?

Zero waste is a goal that, if met, would result in very little waste being created; instead, people would find ways to reduce the amount of materials used in the first place and to reuse or recycle worn or unwanted materials. Zero Waste principles also apply to hazardous wastes, by eliminating or reducing the use of hazardous materials in products, and reducing hazardous by-products.

No system that does not support a zero waste policy can every become truly sustainable and, far from being a pipe dream, zero waste policies are being effectively implemented all over the world.

The omission of vital zero waste tools such as full cost accounting and life cycle analysis and assessment, and the lack of any meaningful targets, means that it will be impossible to even begin to move waste management from an *ad hoc* fire-fighting exercise towards effective waste management, let alone achieve the goal of zero waste.

Hazardous waste – do we know what we produce?

It is important to recognise that the DEAT does not know exactly how much hazardous waste is stockpiled in SA, how much is being produced each day and how much is being incinerated and treated in process by companies. In this regard a situational analysis would be very useful.

Numerous products on the market release residues of pesticides, plasticizers, surfactants and toxic metabolites into the general environment. This invisible waste stream is predominantly comprised of synthetic chemicals which are often endocrine disrupting chemicals. This kind of waste is not contemplated in the Bill.

In other countries moves have been made to reclassify waste into "secondary fuels", which are used in cement kilns and power stations. This reclassification can lead to dangerous situations and a high-court ruling in Britain has declared the practice illegal. Our Bill should ensure that waste cannot be reclassified as fuel in South Africa.

What groundWork wants

1. We want the **incineration** of all waste matter to **be banned** in South Africa. We believe that there are viable alternatives to incineration, and that these alternatives are substantially less harmful to people and to the environment than burning is.
2. We want clear and unambiguous reference to **zero waste** included in the Bill in such a manner that the Polokwane Convention undertakings can be met. This would include proper requirements for Life Cycle Analyses and Full Cost Accounting of all scheduled products. It would also include concepts such as separation at source (where waste is separated by the generator of that waste).
3. We want **salvaging to be recognised** in such a manner that the current exploitation of salvagers and their children will cease and that those who choose to salvage can do so in the expectation of being safe, reasonably treated and fairly recompensed.
4. We want the Minister's **discretionary powers to be curbed**. In the current version of the Bill there is too much power vested in the Minister and because of possible bureaucracy, and changes in government, this is an inefficient way to legislate waste. We should move instead towards legislating a National Solid Waste Management Commission, comprised of many relevant role players including Departments of Health, Science and Technology, CSOs, Industry, Agriculture and the DEAT.
5. We want **clear timeframes for delivery**.
6. We want law that **supports minimization**, and **targets** that are entrenched in law.
7. We want **health care waste to be dealt with as a separate issue**, and for the incineration of health care waste to be banned.
8. Because of its complexity, we want **mining waste** to be dealt with as a separate issue in this bill
9. We want law that meets our responsibilities with regard to the various **international conventions** that have been signed by South Africa.

groundWork is a non-profit environmental justice service and developmental organisation working primarily in South Africa, but increasingly in Southern Africa. groundWork seeks to improve the quality of life of vulnerable people in Southern Africa through assisting civil society to have a greater impact on environmental governance.

For further information please contact: Musa Chamane on 033-342-5662 or e-mail him at musa@groundwork.org.za

To see the full comments on the Bill, as submitted by groundWork and other CSOs to government, please refer to our website at www.groundwork.org.za

