

SOUTH AFRICAN WASTE CLASSIFICATION SYSTEM

1. Background

Regulations regarding the classification of waste¹ were promulgated in August 2013². These regulations replaced the "Minimum Requirements" previously published by the Department of Water Affairs. The latter detailed the requirements for the handling, classification, disposal of waste to landfill and water monitoring.

2. Introduction to Waste Classification

The Waste Classification and Management Regulations, August 2013, require that all waste, other than pre-classified waste (the list of pre-classified waste-which includes all types of general waste-for which Waste Classification is not required is set out in a table below³), be classified and until this is done, the "precautionary principle" ³ applies, i.e., waste must be regarded as highly hazardous until proven otherwise.

If waste is not classified in accordance with the requirements of the regulations, the handling, storage, treatment, transportation, reuse, recycling and/or disposal of it becomes problematic due to inadequate information. In the absence of classification, the kick-in of the "precautionary principle" ensures that employees, contractors and the receiving environment is not put at risk.

Disposal of high hazardous waste is expensive and it is therefore in the interests of every business requiring the disposal of waste to do classification of its waste to ensure the waste is being disposed of cost effectively.

3. The objective of Waste Classification

The objective of the waste classification process is to establish:

- A. **The hazard class of the waste**: whether it is hazardous based on its physical, health and environmental properties;
- B. **The hazard category of the waste**: the degree of hazard the waste poses to the environment.

4. The process of Waste Classification

Classification of waste is a four step process:

 Step 1: IDENTIFICATION of the waste- evaluate against waste definition and determine if it is potentially hazardous;



- Step 2: TESTING AND ANALYSIS of the waste to determine hazardous components/properties/constituents/properties and concentrations to confirm waste hazardous or not;
- Step 3: HAZARD CLASSIFICATION in terms of SANS 10234.
- Step 4: **DETERMINE WASTE TYPE AND LANDFILL SITE** analyses waste and its residue to determine Waste Classification and the requirements for its disposal.

5. The output of Waste Classification

The primary output of Waste Classification is to determine if the waste is hazardous and the degree of hazard.

An output of Step 3, Hazard Classification, is a safety data sheet 4 (SDS) for the waste which will provide information for persons who handle, use, store, transport, treat, and/or dispose of the waste. This SDS must accompany waste at all times.

Waste Classification also determines the class of landfill that may accept the waste.

6. Other aspects

The IWMSA lists a number of other important aspects of the Waste Classification and Management Regulations, August 2013 which should be noted ⁵.

7. Urgency

It must be further noted that the grace period for Waste Classification has expired and those who have not started this process are advised to do so urgently.

8. Assistance

Multi-Waste is able to assist you with this process. We have available a third party chemist, very knowledgeable in the Waste Classification process who is able to to conduct the SANS 10234 requirements.

Please contact me at pdolan@multi-waste.co.za should you require further information or assistance. Also, see our website <u>www.multi-waste.co.za</u> for useful links.



¹ Waste is classified into two general categories, namely: General waste and Hazardous wastethese are defined as follows in the National Environmental Management: Waste Management Amendment Bill, 2013

- "General waste" means waste that does not pose an immediate hazard or threat to health or the environment, and includes:
 - a. Domestic waste
 - b. Building and demolition waste
 - c. Business waste
 - d. Inert waste
- "Hazardous waste "means any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment.

² Waste Classification and Management Regulations, August 2013. These regulations should be read with:

- National Norms and Standards for Assessment of Waste to Landfill: GG No. 635, 23/08/2013;
- National Norms and Standards for Disposal of Waste to Landfill: GG No. 634, 23/08/2013;
- SANS10234: South African National Harmonized System of Classification and Labelling of Chemicals

³ Precautionary Principle: the worst case scenario is taken where information is lacking



⁴ Pre-Classified waste (Wastes that DO NOT require classification or assessment)

GENERAL WASTE	HAZARDOUS WASTE
Domestic waste	Waste products:
	Asbestos waste
	• PCB waste or PCB containing waste (>50mg/kg or
	50ppm)
	• Expired, spoilt or unusable hazardous products
Business waste not containing	Mixed waste
hazardous waste or hazardous	• General waste, excluding domestic waste which
chemicals	contains hazardous waste or hazardous chemicals
	• Mixed hazardous chemical waste from analytical
	laboratories and laboratories from academic
	institutions in containers of less than 100 litres
Non-infectious animal carcasses	Other:
	Health Care Risk Waste (HCRW)
Garden Waste	
Waste Packaging	
Waste Tyres	
Building and demolition waste not	
containing hazardous waste or	
hazardous chemicals	
Excavated earth material not	
containing hazardous waste or	
hazardous chemicals	

⁵ Safety Data Sheet (SDS) is a reference document providing information for handling, use, storage, transport, treat and or dispose of the chemical substance or mixture.

⁶ The Institute of Waste Management of Southern Africa list the following important aspects of the Waste Classification and Management Regulations, August 2013:

- All waste other than pre-classified waste must be classified;
- Classification must take place in accordance with the requirements of SANS10234-GHS (2008)
- Waste must be classified within 180 days of generation;
- Waste must not be mixed or diluted prior to classification;
- Waste must be reclassified every five years or within 30 days of any change to input material or process;
- Waste must be treated, reused, recovered or disposed of within 18 months of generation;
- A safety data sheet must be prepared and accompany waste at all times;
- Waste containers must be labeled, identifying content and date of containerization;
- Waste generators must keep records of waste classification and management for five years;



WASTE CLASSIFICATION EXPLAINED

• Offences and penalties range from R20 000.00 to R10 000 000.00 and/or one year imprisonment to ten years

(Institute of Waste Management Southern Africa)