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GOVERNMENT NOTICE

DEPARTMENT OF ENVIRONMENTAL AFFAIRS

No. R. 634 **23 August 2013**

NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008)

WASTE CLASSIFICATION AND MANAGEMENT REGULATIONS

I, Bomo Edith Edna Molewa, Minister of Water and Environmental Affairs, hereby make regulations pertaining to waste classification and management under section 69(1)(a), (b), (g), (h), (m), (q), (r), (s), (dd), and (ee) read with section 73 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) for implementation in the Schedule hereto.

BOMO EDITH EDNA MOLEWA

MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

SCHEDULE

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CHAPTER 1

INTERPRETATION AND PURPOSE OF REGULATIONS

Definitions

1. (1) In these Regulations, any word or expression to which a meaning has been assigned in the Act has that same meaning, and unless the context indicates otherwise—

"emergency" means an unexpected sudden occurrence, including a major emission, fire or explosion leading to serious danger to the public or potentially serious pollution of or detriment to the environment, whether immediate or delayed.

"SANS 10234" means the latest edition of the South African National Standard Globally Harmonized System of Classification and Labelling of Chemicals (GHS);

"the Act" means the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008);

"waste classification" means establishing—

(a) whether a waste is hazardous based on the nature of its physical, health and environmental hazardous properties (hazard classes); and

(b) the degree or severity of hazard posed (hazard categories);

"waste generator" means any person whose actions, production processes or activities, including waste management activities, results in the generation of waste;

"waste manager" means any person who re-uses, recycles, recovers, treats or disposes of waste;

"waste management facility" means a place, infrastructure, structure or containment of any kind, wherein, upon or at, a waste management activity takes place and includes a waste transfer station, container yard, landfill site, incinerator, a lagoon, recycling or a composting facility;

"waste manifest system" means a system of control documentation, which accompanies a load of hazardous waste transported from the point of generation to the waste management facility;

"waste transporter" means any person who conveys or transfers waste—

(a) between the waste generator and a waste management facility; or

(b) between waste management facilities.

(2) The term waste in these Regulations has the meaning as assigned by the Act, and is deemed to include both general waste and hazardous waste.

(3) General waste and hazardous waste have the meanings as assigned by the Act, and are referred to as such in these Regulations, where specific provisions are only applicable to either general or hazardous waste.

(4) For any action contemplated in terms of these Regulations for which a timeframe is prescribed, the specified numbers of days are ordinary days.

Purpose of Regulations

2. (1) The purpose of these Regulations is to—

(a) regulate the classification and management of waste in a manner which supports and implements the provisions of the Act;

(b) establish a mechanism and procedure for the listing of waste management activities that do not require a Waste Management Licence;

(c) prescribe requirements for the disposal of waste to landfill;

(d) prescribe requirements and timeframes for the management of certain wastes; and

(e) prescribe general duties of waste generators, transporters and managers.

Application of Regulations

3. (1) These Regulations apply uniformly in all Provinces of the Republic of South Africa.

(2) These Regulations do not apply to generators of domestic waste that is collected by a municipality.

(3) Subject to subregulation (2), these regulations apply to all waste generators, waste transporters and waste managers.

CHAPTER 2

WASTE CLASSIFICATION

Waste Classification

4. (1) Wastes listed in Annexure 1 of these Regulations do not require classification in terms of SANS 10234.

(2) Subject to subregulation (1), all waste generators must ensure that the waste they generate is classified in accordance with SANS 10234 within one hundred and eighty (180) days of generation.

(3) Waste must be kept separate for the purposes of classification in terms of subregulation (2), and must not be mixed prior to classification.

(4) Waste must be re-classified in terms of subregulation (2) every five (5) years, or within 30 days of modification to the process or activity that generated the waste, changes in raw materials or other inputs, or any other variation of relevant factors.

(5) Waste that has been subjected to any form of treatment must be re-classified in terms of subregulation (2), including any waste from the treatment process.

(6) If the Minister reasonably believes that a waste has not been classified correctly in terms of subregulation (2), he or she may require the waste generator to have the classification peer reviewed to confirm the classification.

Safety Data Sheets

5. (1) Subject to Regulation 4(2) and subregulations (2) and (3), generators of hazardous waste must ensure that a safety data sheet for the hazardous waste is prepared in accordance with SANS 10234.

(2) Subregulation (1) does not apply to generators of waste listed in item (2)(b) of Annexure 1 to these Regulations provided that the safety data sheets for these wastes are prepared as follows—

(a) safety data sheets for waste listed in item (2)(b)(i) of Annexure 1 to these Regulations must be prepared in accordance with SANS 10234 for the product the waste originates from; and

(b) safety data sheets for waste listed in item (2)(b)(ii) of Annexure 1 to these Regulations must be prepared in accordance with SANS 10234 reflecting the details of the specific hazardous waste/s or hazardous chemical/s in the waste.

(3) Generators of waste listed in item (2)(b)(iii) of Annexure 1 to these Regulations do not have to prepare a safety data sheet for the waste.

(4) Every holder of hazardous waste, except waste listed in item (2)(b)(iii) of Annexure 1 to these Regulations, must be in possession of the safety data sheet/s for the waste referred to in subregulations (1) and (2).

CHAPTER 3

WASTE MANAGEMENT

General

6. (1) Waste transporters and waste managers must not accept waste that has not been classified in terms of Regulation 4 unless such waste is listed in Annexure 1 of these Regulations.

(2) Waste must not be diluted solely to reduce the concentration of its constituents for the purposes of classification in terms of Regulation 4(2), or assessment of the waste in accordance with the Norms and Standards for Assessment of Waste for Landfill Disposal set in terms of section 7(1) of the Act.

(3) Any container or storage impoundment holding waste must be labelled, or where labelling is not possible, records must be kept, reflecting the following—

(a) the date on which waste was first placed in the container;

(b) the date on which waste was placed in the container for the last time when the container was filled, closed, sealed or covered;

(c) the dates when, and quantities of, waste added and waste removed from containers or storage impoundments, if relevant;

(d) the specific category or categories of waste in the container or storage impoundment as identified in terms of the National Waste Information Regulations, 2012; and

(e) the classification of the waste in terms of Regulation 4 once it has been completed.

(4) Waste generators must ensure that their waste is re-used, recycled, recovered, treated and/or disposed of within eighteen (18) months of generation.

(5) Waste managers must not store waste for more than eighteen (18) months from the date of receipt from the waste generator.

(6) The re-use, recycling, recovery, treatment or disposal of waste stored in an existing facility prior to promulgation of these Regulations must be commenced with within five (5) years from the date of commencement of these Regulations.

Waste Treatment

7. (1) Waste must not be mixed or treated where this would—

(a) reduce the potential for re-use, recycling or recovery; or

(b) result in treatment that is not controlled and not permanent.

(2) Notwithstanding Regulations 6(2) and 7(1), waste may be blended or pre-treated to—

(a) enable potential for re-use, recycling, recovery or treatment; or

(b) reduce the risk associated with the management of the waste.

Waste Disposal to Landfill

8. (1) Unless otherwise directed by the Minister to ensure a better environmental outcome, or in response to an emergency so as to protect human health, property or the environment—

(a) waste generators must ensure that their waste is assessed in accordance with the Norms and Standards for Assessment of Waste for Landfill Disposal set in terms of section 7(1) of the Act prior to the disposal of the waste to landfill;

(b) waste generators must ensure that the disposal of their waste to landfill is done in accordance with the Norms and Standards for Disposal of Waste to Landfill set in terms of section 7(1) of the Act; and

(c) waste managers disposing of waste to landfill must only do so in accordance with the Norms and Standards for Disposal of Waste to Landfill set in terms of section 7(1) of the Act.

(2) Subregulation (1)(a) applies to all waste generators, excluding—

(a) generators of waste listed in items (2)(a) and (b) of Annexure 1 to these Regulations; and

(b) generators of business waste that is collected by a municipality.

(3) Subregulation (1)(b) applies to all waste generators, excluding—

(a) generators of waste listed in item (2)(a) of Annexure 1 to these Regulations; and

(b) generators of business waste that is collected by a municipality.

CHAPTER 4

WASTE MANAGEMENT ACTIVITIES THAT DO NOT REQUIRE A WASTE MANAGEMENT LICENCE

Motivation for and consideration of listing Waste Management Activities that do not require a Waste Management Licence

9. (1) Any person may submit a motivation to the Minister to list a specific waste management activity as an activity that does not require a waste management licence in terms of section 19 of the Act, but that is required to adhere to the requirements or standards determined in terms of section 19(3)(a) of the Act for that activity.

(2) A motivation to the Minister in terms of subregulation (1) must demonstrate that the waste management activity, including associated storage and handling, can be implemented and conducted consistently and repeatedly in a controlled manner without unacceptable impact on, or risk to, the environment or health.

(3) In accordance with subregulation (2), a motivation to the Minister in terms of subregulation (1) must contain the following information, as relevant to the proposed waste management activity:

(a) basis for the motivation, including benefits of the proposed activity relating to achieving waste minimisation or diversion of waste from landfill;

(b) description of the waste or wastes the proposed activity relates to, including quantities, classification, physical characteristics, chemical composition, sources generating the waste, and current management thereof;

(c) description of the proposed waste management activity and processes, including the waste manager, storage and handling, infrastructure, pre-treatment activities, and other inputs or raw materials required;

(d) description of the quantity, classification and management of any waste generated by the proposed activity;

(e) information on the successful implementation of the proposed activity, or similar activities, locally and internationally, where available;

(f) details of local and international specifications or standards relating to the waste and the proposed waste management activity, where available;

(g) reference to legislation and policy applicable to the proposed activity, including relevant waste minimisation or waste management plans;

(h) description of how the physical, biological, social, economic and cultural aspects of the environment may be adversely affected by the proposed activity, and how these would be mitigated or managed;

(i) identification of aspects that may constrain the wide or general implementation of the proposed activity, and how these can be managed;

(j) an assessment of the potential environmental and health impacts and risks that could result from the proposed activity, which would test the general implementation of the proposed activity at several sites with different characteristics;

(k) proposed requirements or standards specific to the proposed waste management activity, including associated storage and handling, that would ensure that the activity can be implemented and conducted consistently and in a controlled manner, which must include the following as relevant to the proposed waste management activity:

(i) roles and responsibilities of the waste generator and waste manager;

(ii) management, monitoring and reporting procedures;

(iii) quality assurance and control measures, including sampling and analyses, as well as chemical concentration limits for specific components in the waste, or other characteristics of the waste, which may render it unsuitable for the proposed waste management activity;

(iv) sources from which the waste may originate, and any other limitations to the use or prohibited uses of the waste;

(v) locality or geographical area where the proposed activity may or may not take place;

(vi) standard operating procedures;

(vii) environmental management plan; and

(viii) design specifications or standards.

(l) discussion on the practicality of, and ability to effectively implement, the requirements or standards that the activity may be subjected to;

(m) a description of any assumptions made and any uncertainties or gaps in knowledge; and

(n) any other specific information that may be required by the Minister, including an independent review of information submitted in support of the motivation.

(4) Based on the review and consideration of the information supplied in support of a motivation in terms of Regulation 9(1) the Minister may—

(a) subject to section 19(10)(a) of the Act, list the specific waste management activity in terms of section 19(1) and (3)(a) of the Act as an activity that does not require a waste management licence;

(b) require additional information to be furnished within a specified timeframe; or

(c) eject the motivation with reasons.

(5) A motivation in terms of Regulation 9(1) which is substantially similar to a previous motivation that had been rejected in terms of subregulation (2)(c), may only be resubmitted if—

(a) the application contains new and material information not previously submitted to the Minister; or

(b) a period of three (3) years has elapsed since the application was lodged.

CHAPTER 5

RECORD KEEPING AND WASTE MANIFEST SYSTEM

Records of waste generation and management

10. (1) Waste generators must keep accurate and up to date records of the management of the waste they generate, which records must reflect—

(a) the classification of the wastes;

(b) the quantity of each waste generated, expressed in tons or cubic metres per month;

(c) the quantities of each waste that has either been re-used, recycled, recovered, treated or disposed of; and

(d) by whom the waste was managed.

(2) Subregulation (1) does not apply to generators of waste listed in item (2)(a) of Annexure 1 to these Regulations.

(3) The records contemplated in subregulation (1) must be—

(a) retained for a period of at least five (5) years; and

(b) made available to the Department upon request.

Waste Manifest System

11. (1) Every holder of waste that has been classified as hazardous in terms of Regulation 4(2) or a waste that is listed in item (2)(b) of Annexure 1 to these Regulations, must be in possession of a waste manifest document containing the relevant information specified in Annexure 2 to these Regulations.

(2) Generators of waste classified as hazardous in terms of Regulation 4(2) or waste that is listed in item (2)(b) of Annexure 1 to these Regulations, must complete a waste manifest document containing the information specified in item (2)(a) of Annexure 2 to these Regulations for each consignment of waste transported to a waste manager.

(3) Subregulations (1) and (2) do not apply to waste generators who are also the waste manager and manage the waste at the same premises where it was generated.

(4) Waste transporters must not accept waste classified as hazardous in terms of Regulation 4(2) or waste that is listed in item (2)(b) of Annexure 1 to these Regulations for transport, unless the waste manifest document accompanies the waste.

(5) All transporters of waste classified as hazardous in terms of Regulation 4(2) or waste that is listed in item (2)(b) of Annexure 1 to these Regulations must—

(a) complete a waste manifest document containing the information specified in item (2)(b) of Annexure 2 to these Regulations for each consignment of waste transported;

(b) provide the information to the generator before the waste is transported from the premises of the generator; and

(c) provide the information to the waste manager at the time of delivery of the waste to the facility for a waste management activity.

(6) Waste managers must not accept waste classified as hazardous in terms of Regulation 4(2) or waste that is listed in item (2)(b) of Annexure 1 to these Regulations, unless the waste manifest document accompanies the waste.

(7) All managers of waste classified as hazardous in terms of Regulation 4(2) or waste that is listed in item (2)(b) of Annexure 1 to these Regulations, must complete the waste manifest document with the information specified in item (2)(c) of Annexure 2 to these Regulations, confirming that the waste load has been accepted and that the waste has been managed.

(8) All waste generators, transporters and managers subjected to the requirements of subregulations (1), (2), (4), (5), (6) and (7) must—

(a) retain copies, or be able to access copies/records, of the waste manifest documentation for a period of at least five (5) years; and

(b) make the waste manifest documentation available to the Department upon request.

CHAPTER 6

GENERAL MATTERS

Implementation and Transitional Provisions

12. (1) All wastes that were classified in terms of the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (2nd Edition, 1998; Department of Water Affairs and Forestry), or waste for which an alternative classification was approved by the Department of Water Affairs or Department of Environmental Affairs, prior to these Regulations taking effect, must be—

(a) re-classified in terms of Regulation 4(2); and

(b) assessed in terms of Regulation 8(1)(a) if the waste is to be disposed to landfill,

within three (3) years from the date of commencement of these Regulations.

(2) Waste that has been produced prior to these Regulations taking effect, but that has not been classified at the date of commencement of these Regulations must be—

(a) classified in terms of Regulation 4(2); and

(b) assessed in terms of Regulation 8(1)(a) if the waste is to be disposed to landfill, within eighteen (18) months from the date of commencement of these Regulations.

(3) Regulations 4(2) and 6(1) do not apply for a period of three (3) years from the date of commencement of these Regulations, provided that the waste has been classified in terms of the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (2nd Edition, 1998; Department of Water Affairs and Forestry) or an alternative classification of the waste was approved by the Department of Water Affairs or Department of Environmental Affairs prior to these Regulations taking effect.

(4) Regulation 4(2) does not apply for a period of eighteen (18) months from the date of commencement of these Regulations, provided that the waste has been generated but not classified prior to the date of commencement of these Regulations.

(5) Subject to subregulation (6), Regulation 6(3) must be complied with within one (1) year from the date of commencement of these Regulations.

(6) Regulation 6(3)(e) does not apply for a period of—

(a) three (3) years from the date of commencement of these Regulations, provided that the waste has been classified in terms of the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (2nd Edition, 1998; Department of Water Affairs and Forestry) prior to these Regulations taking effect, and this classification is reflected in the labelling or records required in terms of Regulation 6(3); or

(b) three (3) years from the date of commencement of these Regulations, provided that an alternative classification of the waste was approved by the Department of Water Affairs or Department of Environmental Affairs prior to these Regulations taking effect, and this classification is reflected in the labelling or records required in terms of Regulation 6(3).

(7) Regulation 6(6) does not apply to waste that has been or is being treated through macro-encapsulation approved by the Department of Water Affairs or the Department of Environmental Affairs.

(8) Regulation 8(1)(a) does not apply for a period of—

(a) three (3) years from the date of commencement of these Regulations, provided that the waste has been classified in terms of the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (2nd Edition, 1998; Department of Water Affairs and Forestry) prior to the date of commencement of these Regulations; or

(b) three (3) years from the date of commencement of these Regulations, provided that an alternative classification of the waste was approved by the Department of Water Affairs or the Department of Environmental Affairs prior to the date of commencement of these Regulations.

(9) Regulations 10 and 11 take effect one (1) year after the date of commencement of these Regulations.

(10) The requirements of Regulations 10 and 11 apply to waste that was classified in terms of the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (2nd Edition, 1998; Department of Water Affairs and Forestry) prior to the date of commencement of these Regulations.

Offences and Penalties

13. (1) A person is guilty of an offence if that person—

(a) fails to comply with Regulations 4(2), (3), (4), (5), (6), 5, 6, 7(1), 8(1), 10(1), 10(3), 11(1), (2), (4), (5), (6), (7), (8) or 12; or

(b) provides incorrect or misleading information in any record or document required or submitted in terms of these Regulations.

(2) A person convicted of an offence under subregulation (1)(a) is liable to a fine not exceeding R10 million or to imprisonment for a period not exceeding 10 years, or to both such fine or such imprisonment.

(3) A person convicted of an offence under subregulation (1)(b) is liable to a fine of R20 000 or to imprisonment for a period not exceeding 1 year or to both a fine and such imprisonment.

Short Title and Commencement

14. These Regulations are called the Waste Classification and Management Regulations, 2013.

CHAPTER 7

ANNEXURES TO REGULATIONS

Annexure 1: Wastes that do not require Classification or Assessment

(1) The wastes specified in item 2 of this Annexure do not require classification in terms of Regulation 4(1), nor assessment in terms of Regulation 8(1)(a).

(2) (a) General waste—

(i) Domestic waste;

(ii) Business waste not containing hazardous waste or hazardous chemicals;

(iii) Non-infectious animal carcasses;

(iv) Garden waste;

(v) Waste packaging;

(vi) Waste tyres;

(vii) Building and demolition waste not containing hazardous waste or hazardous chemicals; and

(viii) Excavated earth material not containing hazardous waste or hazardous chemicals.

(2) (b) Hazardous waste—

(i) Waste Products:

- Asbestos Waste;
- PCB waste or PCB containing waste (> 50 mg/kg or 50 ppm); and
- Expired, spoilt or unusable hazardous products.

(ii) Mixed Waste:

- General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals; and

- Mixed, hazardous chemical wastes from analytical laboratories and laboratories from academic institutions in containers less than 100 litres.

(iii) Other:

- Health Care Risk Waste (HCRW).

Annexure 2: Waste Manifest System Information Requirements

(1) The information specified in item 2 of this Annexure must be reflected in the waste manifest document required in terms of Regulation 11.

(2) (a) Information to be supplied by the Waste Generator (Consignor)—

(i) Unique consignment identification number;

(ii) If applicable, the SAWIS Registration number in terms of the National Waste Information Regulations, 2012;

(iii) Generator's contact details (contact person, physical & postal address, phone, fax, email);

(iv) Physical address of the site where the waste was generated (if different from (iii));

(v) Contact number in case of an incident or after hours;

(vi) Origin / source of the waste (process or activity);

(vii) Classification of the waste and Safety Data Sheet;

(viii) Quantity of waste by volume (m^3) or weight (tons);

(ix) Date of collection / dispatch;

(x) Intended receiver (waste manager); and

(xi) Declaration (content of the consignment is fully and accurately described, classified, packed, marked and labelled, and in all respects in proper condition for transportation in accordance with the applicable laws and regulations).

(2) (b) Information to be supplied by the Waste Transporter—

(i) Name of transporter;

(ii) Address and telephone number of transporter; and

(iii) Declaration acknowledging receipt of the waste.

(2) (c) Information to be supplied by the Waste Manager (Consignee)—

(i) Name, address and contact details;

(ii) Receiving waste management facility name, address and contact details (where different);

(iii) Waste management facility licence number;

(iv) Date of receipt;

(v) Quantity of waste received by weight (tons), and volume (m^3) if applicable;

(vi) Type of waste management applied (re-use, recycling, recovery, treatment, disposal);

(vii) Any discrepancies in information between the different holders of the waste (related to waste quantity, type, classification, physical and chemical properties);

(viii) Waste management reporting description and code in terms of the National Waste Information Regulations, 2012;

(ix) Details on any waste diverted to another waste management facility, and details of the facility; and

(x) Certification and declaration of receipt and final management of the waste.

No. R. 635 **23 August 2013**

NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO.59 OF 2008)

NATIONAL NORMS AND STANDARDS FOR THE ASSESSMENT OF WASTE FOR LANDFILL DISPOSAL

I, Bomo Edith Edna Molewa, Minister of Water and Environmental Affairs, hereby set national norms and standards for the assessment of waste for landfill disposal, under section 7(1)(c) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), in the Schedule hereto.

BOMO EDITH EDNA MOLEWA

MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

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CHAPTER 1

INTERPRETATION AND PURPOSE

Definitions

1. In these National Norms and Standards, any word or expression to which a meaning has been assigned in the Act has that same meaning, and unless the context indicates otherwise—

"Leachable Concentration (LC)" means the leachable concentration of a particular element or chemical substance in a waste, expressed as mg/l;

"Leachable Concentration Threshold (LCT)" means the leachable concentration threshold limit for particular elements and chemical substances in a waste, expressed as mg/l, prescribed in section 6 of these Norms and Standards;

"putrescible waste" means waste that contains organic matter capable of being decomposed by microorganisms, or that will readily decay under normal conditions, giving rise to offensive odours, or which is capable of providing food for birds and animals, thereby attracting vermin or disease-causing vectors such as flies and rodents;

"Total Concentration (TC)" means the total concentration of a particular element or chemical substance in a waste, expressed as mg/kg;

"Total Concentration Threshold (TCT)" means the total concentration threshold limit for particular elements or chemical substances in a waste, expressed as mg/kg, prescribed in section 6 of these Norms and Standards;

"the Act" means the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008);

"the Regulations" means the Waste Classification and Management Regulations, 2013.

Purpose and Application

2. These Norms and Standards prescribe the requirements for the assessment of waste prior to disposal to landfill in terms of Regulation 8(1)(a) of the Regulations.

CHAPTER 2

STANDARD ASSESSMENT METHODOLOGY

Approach

3. (1) To assess waste for the purpose of disposal to landfill, the following are required—

(a) identification of chemical substances present in the waste; and

(b) sampling and analysis to determine the total concentrations (TC) and leachable concentrations (LC) of the elements and chemical substances that have been identified in the waste and that are specified in section 6 of these Norms and Standards.

(2) Within three (3) years of the date of commencement of the Regulations, all analyses of the TC and LC of elements and chemical substances in waste must be conducted by laboratories accredited by the South African National Accreditation System (SANAS) to conduct the particular techniques and analysis methods required.

(3) The TC and LC limits of the chemical substances in the waste must be compared to the threshold limits specified in section 6 of these Norms and Standards for total concentrations (TCT limits) and leachable concentrations (LCT limits) of specific elements and chemical substances.

(4) Based on the TC and LC limits of the elements and chemical substances in the waste exceeding the corresponding TCT and LCT limits respectively, the specific type of waste for disposal to landfill must be determined in terms of section 7 of these Norms and Standards.

Total Concentration (TC) Analysis

4. (1) The TC of all the elements and chemical substances specified in section 6 of these Norms and Standards that are known to occur, likely to occur or can reasonably be expected to occur in the waste must be determined.

(2) The TC of elements and chemical substances in waste must be determined using techniques and analysis methods that will provide reliable, accurate and repeatable results of the TC of elements and chemical substances specified in section 6 of these Norms and Standards.

Leachable Concentration (LC) Analysis

5. (1) The LC of elements and chemical substances must be determined using the Australian Standard Leaching Procedure (AS 4439.1, 4439.2 and 4439.3).

(2) The type of leaching fluid (section 5.2 and 5.3 of AS 4439.3) used in the leaching procedure must be selected as follows —

(a) Waste to be disposed of with, or waste that contains, putrescible wastes: Use 0.1M acetic acid solution with altered pH 5.0 or pH 2.9 determined as per section 7.5(a-e) of AS 4439.3;

(b) Waste to be disposed of with non-putrescible waste: Use a basic 0.1M sodium tetraborate decahydrate solution of pH 9.2 ±0.1, as well as an acetic acid solution with pH 5.0 or pH 2.9) determined as per section 7.5(a-e) of AS 4439.3; or

(c) Non-putrescible waste to be disposed of without any other wastes: Use reagent water.

(3) Existing LC results for elements and chemical substances in wastes, which have been determined in terms of the Toxicity Characteristic Leaching Procedure (TCLP) leach test criteria of the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (2nd Edition, 1998; Department of Water Affairs and Forestry) prior to the Regulations taking effect, may be utilised for comparison with the LCT limits in section 6 of these Norms and Standards to asses waste for the purpose of

disposal of the waste to landfill, for a period not exceeding three (3) years from the date of publication of this Notice.

LCT and TCT Limits

6. (1) Total Concentration Threshold (TCT) Limits (mg/kg):

Elements & Chemical Substances in Waste	TCT0	TCT1	TCT2
Metal Ions			
As, Arsenic	5.8	500	2000
B, Boron	150	15000	60000
Ba, Barium	62.5	6250	25000
Cd, Cadmium	7.5	260	1040
Co, Cobalt	50	5000	20000
Cr_{Total}, Chromium Total	46000	800000	N/A
Cr(VI), Chromium (VI)	6.5	500	2000
Cu, Copper	16	19500	78000
Hg, Mercury	0.93	160	640
Mn, Manganese	1000	25000	100000
Mo, Molybdenum	40	1000	4000
Ni, Nickel	91	10600	42400
Pb, Lead	20	1900	7600
Sb, Antimony	10	75	300
Se, Selenium	10	50	200
V, Vanadium	150	2680	10720
Zn, Zinc	240	160000	640000
Inorganic Anions			
TDS			
Chloride			
Sulphate			
NO_3 as N, Nitrate-N			
F, Fluoride	100	10000	40000
CN^- (total), Cyanide Total	14	10500	42000
Organics			
Benzene		10	40
Benzo(a)pyrene		1.7	6.8
Carbon tetrachloride		4	16
Chlorobenzene		8800	35200
Chloroform		700	2800
2-Chlorophenol		2100	8400
Di (2 ethylhexyl) phthalate		40	160
1,2-Dichlorobenzene		31900	127600
1,4-Dichlorobenzene		18400	73600
1,2-Dichloroethane		3.7	14.8
1,1-Dichloroethylene		150	600
1-2-Dichloroethylene		3750	15000

Elements & Chemical Substances in Waste	TCT0	TCT1	TCT2
Dichloromethane		16	64
2,4-Dichlorophenol		800	3200
2,4-Dinitrotoluene		5.2	20.8
Ethylbenzene		540	2160
Formaldehyde		2000	8000
Hexachlorobutadiene		2.8	5.4
Methyl ethyl ketone		8000	32000
MTBE (Methyl t-butyl ether)		1435	5740
Nitrobenzene		45	180
PAHs (total)		50	200
Petroleum H/Cs, C6 to C9		650	2600
Petroleum H/Cs, C10 to C36		10000	40000
Phenols (total, non-halogenated)		560	2240
Polychlorinated biphenyls		12	48
Styrene		120	480
1,1,1,2-Tetrachloroethane		400	1600
1,1,2,2-Tetrachloroethane		5.0	20
Tetrachloroethylene		200	800
Toluene		1150	4600
Trichlorobenzenes (total)		3300	13200
1,1,1-Trichloroethane		1200	4800
1,1,2-Trichloroethane		48	192
Trichloroethylene		11600	46400
2,4,6-Trichlorophenol		1770	7080
Vinyl chloride		1.5	6.0
Xylenes (total)		890	3560
Pesticides			
Aldrin + Dieldrin	0.05	1.2	4.8
DDT + DDD + DDE	0.05	50	200
2,4-D	0.05	120	480
Chlordane	0.05	4	16
Heptachlor	0.05	1.2	4.8

Notes:

- TCT1 limits, where appropriate, have been derived from the land remediation values for commercial/industrial land determined by the Department of Environmental Affairs' "Framework for the Management of Contaminated Land", March 2010. The TCT2 limits were derived by multiplying TCT1 by a factor of 4, as used by the Environmental Protection Agency, Australian State of Victoria.
- If South African limits for TCT1 were unavailable, in general, the limits published by the Environmental Protection Agency, Australian State of Victoria have been used.
- Some TC limits have been adjusted because of various attenuation factors that are observed in landfills.
- Where available, the TCT0 limits for have been obtained from SA Soil Screening Values that are protective of water resources. If not available, the State of Victoria value for fill material (EPA Victoria, Classification of Wastes) has been selected. If limits were not available in these references a conservative value was obtained by dividing the TCT1 value by 100.

(2) Leachable Concentration Threshold (LCT) Limits (mg/l):

Elements & Chemical Substances in Waste	LCT0	LCT1	LCT2	LCT3
Metal Ions				
As, Arsenic	0.01	0.5	1	4
B, Boron	0.5	25	50	200
Ba, Barium	0.7	35	70	280
Cd, Cadmium	0.003	0.15	0.3	1.2
Co, Cobalt	0.5	25	50	200
Cr_{Total}, Chromium Total	0.1	5	10	40
Cr(VI), Chromium (VI)	0.05	2.5	5	20
Cu, Copper	2.0	100	200	800
Hg, Mercury	0.006	0.3	0.6	2.4
Mn, Manganese	0.5	25	50	200
Mo, Molybdenum	0.07	3.5	7	28
Ni, Nickel	0.07	3.5	7	28
Pb, Lead	0.01	0.5	1	4
Sb, Antimony	0.02	1.0	2	8
Se, Selenium	0.01	0.5	1	4
V, Vanadium	0.2	10	20	80
Zn, Zinc	5.0	250	500	2000
Inorganic Anions				
TDS	1000	12 500	25 000	100 000
Chloride	300	15 000	30 000	120 000
Sulphate	250	12 500	25 000	100 000
NO_3 as N, Nitrate-N	11	550	1100	4400
F, Fluoride	1.5	75	150	600
CN^- (total), Cyanide Total	0.07	3.5	7	28
Organics				
Benzene		0.01	0.02	0.08
Benzo(a)pyrene		0.035	0.07	0.28
Carbon tetrachloride		0.20	0.40	1.6
Chlorobenzene		5.0	10	40
Chloroform		15	30	120
2-Chlorophenol		15	30	120
Di (2 ethylhexyl) phthalate		0.50	1	4
1,2-Dichlorobenzene		5	10	40
1,4-Dichlorobenzene		15	30	120
1,2-Dichloroethane		1.5	3	12
1,1-Dichloroethylene		0.35	0.7	2.8
1-2-Dichloroethylene		2.5	5	20
Dichloromethane		0.25	0.5	2
2,4-Dichlorophenol		10	20	80
2,4-Dinitrotoluene		0.065	0.13	0.52

Elements & Chemical Substances in Waste	LCT0	LCT1	LCT2	LCT3
Ethylbenzene		3.5	7	28
Formaldehyde		25	50	200
Hexachlorobutadiene		0.03	0.06	0.24
Methyl ethyl ketone		100	200	800
MTBE (Methyl t-butyl ether)		2.5	5.0	20.0
Nitrobenzene		1	2	8
PAHs (total)		N/A	N/A	N/A
Petroleum H/Cs, C6 to C9		N/A	N/A	N/A
Petroleum H/Cs, C10 to C36		N/A	N/A	N/A
Phenols (total, non-halogenated)		7	14	56
Polychlorinated biphenyls		0.025	0.05	0.2
Styrene		1.0	2	8
1,1,1,2-Tetrachloroethane		5	10	40
1,1,2,2-Tetrachloroethane		0.65	1.3	5.3
Tetrachloroethylene		0.25	0.5	2
Toluene		35	70	280
Trichlorobenzenes (total)		3.5	7	28
1,1,1-Trichloroethane		15	30	120
1,1,2-Trichloroethane		0.6	1	4
Trichloroethylene		0.25	2	8
2,4,6-Trichlorophenol		10.0	20	80
Vinyl chloride		0.015	0.03	0.12
Xylenes (total)		25	50	200
Pesticides				
Aldrin + Dieldrin		0.015	0.03	0.03
DDT + DDD + DDE		1	2	2
2,4-D		1.5	3	3
Chlordane		0.05	0.1	0.1
Heptachlor		0.015	0.03	0.03

Notes:

- LCT1 limits have, where possible, been derived from the lowest value of the standard for human health effects listed for drinking water (LCT0) in South Africa (DWAF, SANS) by multiplying with a Dilution Attenuation Factor (DAF) of 50 as proposed by the Australian State of Victoria, "Industrial Waste Resource Guidelines: Solid Industrial Waste Hazard Categorisation and Management", June 2009 (www.epa.vic.gov.aus). If no standard was available in South Africa then the limits given by the WHO or other appropriate drinking water standard, such as those published in the California Regulations have been used.
- LCT2 limits were derived by multiplying the LCT1 value with a factor of 2, and the LCT3 limits have been derived by multiplying the LCT2 value with a factor of 4. The factors applied represents a conservative assessment of the decrease in risk achieved by the increase in environmental protection provided by more comprehensive liner designs in higher classes of landfill and landfill operating requirements.

Determining Waste Types for Landfill Disposal

7. (1) The specific type of waste for disposal to landfill must be determined by comparing the TC and LC of the elements and chemical substances in the waste with the TCT and LCT limits specified in section 6 of these Norms and Standards.

(2) Based on the assessment of the particular waste destined for disposal to landfill, the type of waste is determined as follows—

(a) Wastes with any element or chemical substance concentration above the LCT3 or TCT2 limits (LC > LCT3 or TC > TCT2) are Type 0 Wastes;

(b) Wastes with any element or chemical substance concentration above the LCT2 but below or equal to the LCT3 limits, or above the TCT1 but below or equal to the TCT2 limits (LCT2 < LC ≤ LCT3 or TCT1 < TC ≤ TCT2), are Type 1 Wastes;

(c) Wastes with any element or chemical substance concentration above the LCT1 but below or equal to the LCT2 limits and all concentrations below or equal to the TCT1 limits (LCT1 < LC ≤ LCT2 and TC ≤ TCT1) are Type 2 Wastes;

(d) Wastes with any element or chemical substance concentration above the LCT0 but below or equal to the LCT1 limits and all TC concentrations below or equal to the TCT1 limits (LCT0 < LC ≤ LCT1 and TC ≤ TCT1) are Type 3 Wastes; or

(e) Wastes with all element and chemical substance concentration levels for metal ions and inorganic anions below or equal to the LCT0 and TCT0 limits (LC ≤ LCT0 and TC ≤ TCT0), and with all chemical substance concentration levels also below the following total concentration limits for organics and pesticides, are Type 4 Wastes—

Chemical Substances in Waste	Total Concentration (mg/kg)
Organics	
TOC	30 000 (= 3%)
BTEX	6
PCBs	1
Mineral Oil (C10 to C40)	500
Pesticides	
Aldrin + Dieldrin	0.05
DDT + DDD + DDE	0.05

Chemical Substances in Waste	Total Concentration (mg/kg)
2,4-D	0.05
Chlordane	0.05
Heptachlor	0.05

(3) If a particular chemical substance in a waste is not listed with corresponding LCT and TCT limits in section 6 of these Norms and Standards, and the waste has been classified as hazardous in terms of regulation 4(2) of the Regulations based on the health or environmental hazard characteristics of the particular element or chemical substance, the following applies –

(a) the waste is considered to be Type 1 Waste; and

(b) the Department must be informed in writing in 30 days of the particular element or chemical substance not listed in section 6 of these Norms and Standards.

(4) Notwithstanding section 7(2) of these Norms and Standards, if the TC of an element or chemical substance is above the TCT2 limit, and the concentration cannot be reduced to below the TCT2 limit, but the LC for the particular element or chemical substance is below the LCT3 limit, the waste is considered to be Type 1 Waste.

(5) Wastes listed in item (2)(b) of Annexure 1 to the Regulations are considered to be Type 1 Waste, unless assessed and determined otherwise in terms of these Norms and Standards.

(6) Notwithstanding section 7(2) of these Norms and Standards, wastes with all element or chemical substance leachable concentration levels for metal ions and inorganic anions below or equal to the LCT0 limits are considered to be Type 3 waste, irrespective of the total concentration of elements or chemical substances in the waste, provided that—

(a) all chemical substance concentration levels are below the following total concentration limits for organics and pesticides:

Chemical Substances in Waste	Total Concentration (mg/kg)
Organics	
TOC	30 000 (= 3%)

Chemical Substances in Waste	Total Concentration (mg/kg)
BTEX	6
PCBs	1
Mineral Oil (C10 to C40)	500
Pesticides	
Aldrin + Dieldrin	0.05
DDT + DDD + DDE	0.05
2,4-D	0.05
Chlordane	0.05
Heptachlor	0.05

(b) the inherent physical and chemical character of the waste is stable and will not change over time; and

(c) the waste is disposed of to landfill without any other waste.

No. R. 636 **23 August 2013**

DEPARTMENT OF ENVIRONMENTAL AFFAIRS

NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008)

NATIONAL NORMS AND STANDARDS FOR DISPOSAL OF WASTE TO LANDFILL

I, Bomo Edith Edna Molewa, Minister of Water and Environmental Affairs, hereby set national norms and standard for the assessment of waste for landfill disposal, under section 7(1)(c) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), in the Schedule hereto.

BOMO EDITH EDNA MOLEWA

MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

SCHEDULE

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CHAPTER 1

INTERPRETATION AND PURPOSE

Definitions

1. In these National Norms and Standards, any word or expression to which a meaning has been assigned in the Act has that same meaning, and unless the context requires otherwise—

"the Act" means the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008);

"the Regulations" means the Waste Classification and Management Regulations, 2013.

Purpose and Application

2. These Norms and Standards determine the requirements for the disposal of waste to landfill as contemplated in regulation 8(1)(b) and (c) of the Regulations.

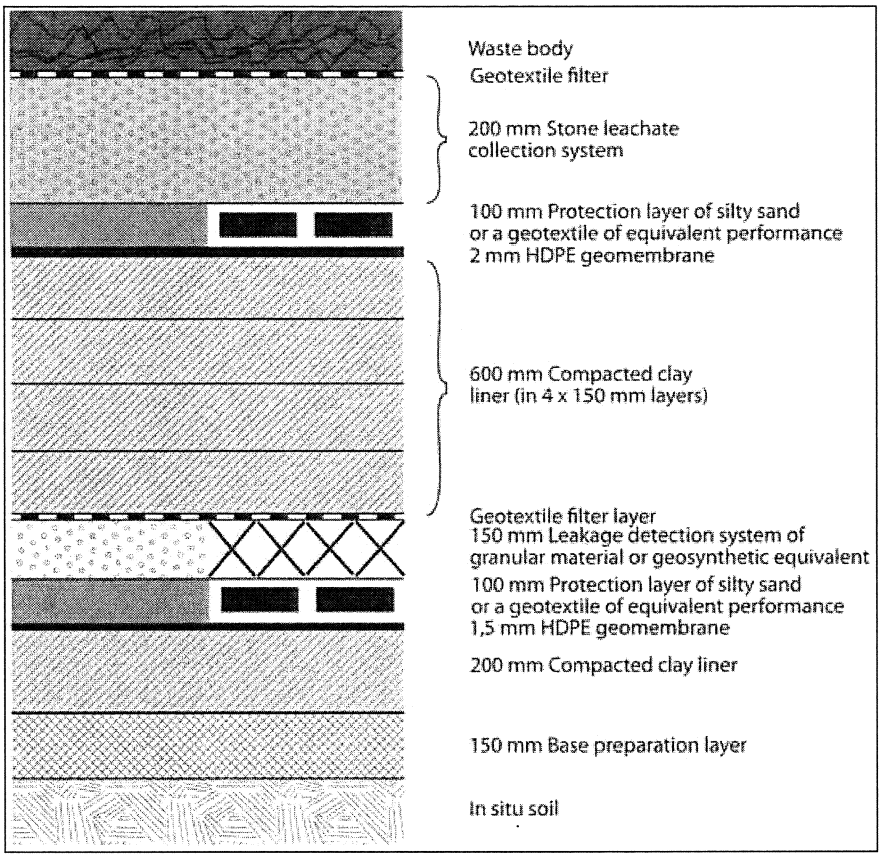
CHAPTER 2

STANDARD CONTAINMENT BARRIER DESIGN, WASTE ACCEPTANCE AND WASTE DISPOSAL REQUIREMENTS

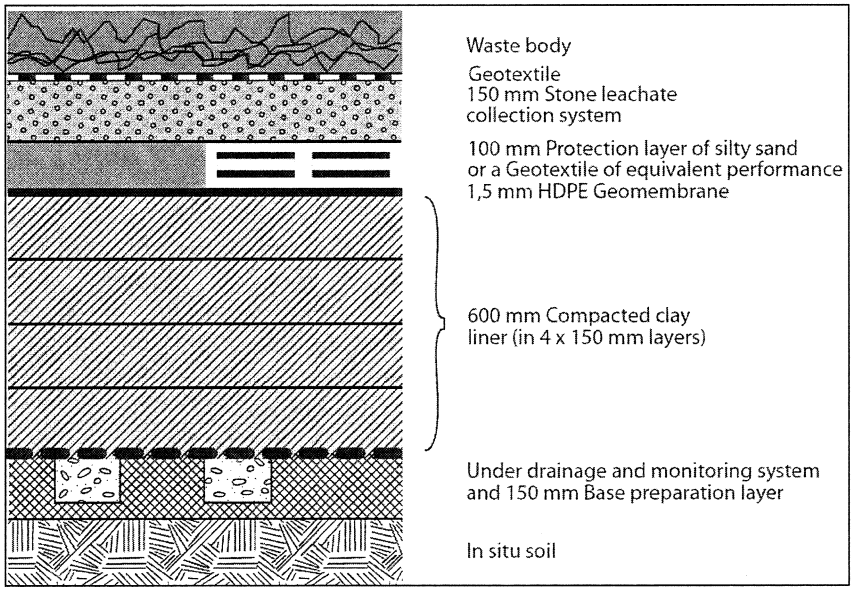
Landfill Classification and Containment Barrier Design

3 (1) The containment barriers of landfills for the disposal of waste in terms of section 4 of these Norms and Standards must comply with the following minimum engineering design requirements—

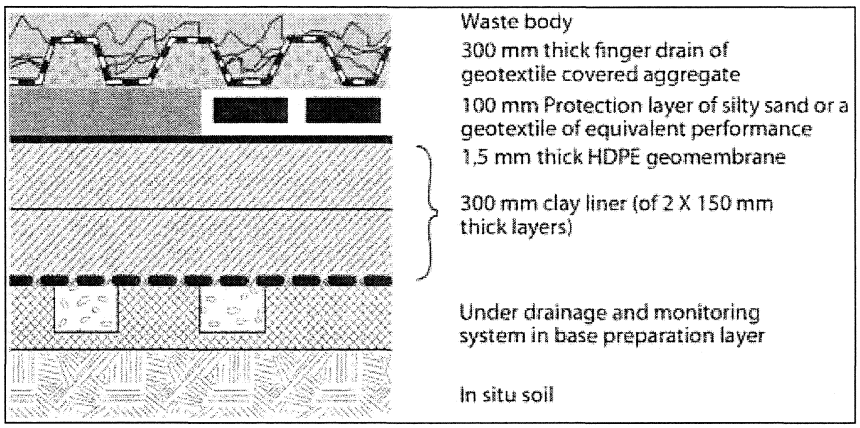
(a) Class A Landfill:



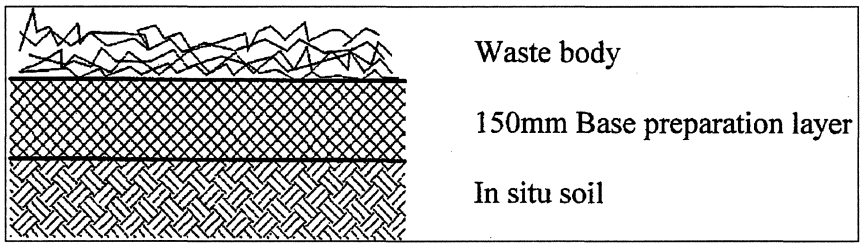
(b) Class B Landfill:



(c) Class C Landfill:



(d) Class D Landfill:



(2) The following containment barrier requirements must be included in an application for waste management licence approval of a landfill site or cell —

(a) design reports and drawings that must be certified by a registered, professional civil engineer prior to submission to the competent authority;

(b) service life considerations that must be quantified taking into account temperature effects on containment barriers;

(c) total solute seepage (inorganic and organic) that must be calculated in determining acceptable leakage rates and action leakage rates;

(d) alternative elements of proven equivalent performance which has been considered, such as the replacement of —

(i) granular filters or drains with geosynthetic filters or drains;

(ii) protective soil layers with geotextiles; or

(iii) clay components with geomembranes or geosynthetic clay liners;

(e) All drainage layers must contain drainage pipes of adequate size, spacing and strength to ensure atmospheric pressure within the drainage application for the service life of the landfill;

(f) Alternative design layouts for slopes exceeding 1:4 (vertical: horizontal) may be considered provided equivalent performance is demonstrated;

(g) Construction Quality Assurance during construction;

(h) Geosynthetic materials must comply with relevant South African National Standard specifications, or any prescribed management practice or standards which ensure equivalent performance; and

(i) Consideration of the compatibility of liner material with the waste stream, in particular noting the compatibility of natural and modified clay soils exposed to waste containing salts.

(3) The classification and containment barrier design of all new landfills, as well as new working cells at existing landfills, must be implemented in accordance with section 3(1) and (2) of these Norms and Standards.

(4) Notwithstanding section 3(3) of these Norms and Standards, waste may be disposed of in terms of section 4(1), (2), (3) and (4) of these Norms and Standards at landfills with the liner design requirements for landfills contained in the Minimum Requirements for Waste Disposal by Landfill (2nd Edition, 1998; Department of Water Affairs and Forestry), or at landfills with an alternative liner design approved by the competent authority for the life-span of the operational cell, subject to the following conditions—

(a) the current working cell at the landfill was operating lawfully in terms of the Act prior to the Regulations coming into operation;

(b) the next working cell at the landfill was legally approved prior to the Regulations coming into operation; or

(c) an application for approval of a new landfill or working cell was submitted to the competent authority, and a decision has not been taken or is still under consideration prior to the Regulations coming into operation.

Waste Acceptance Criteria for Disposal to Landfill

4. (1) Waste assessed in terms of the *Norms and Standards for Assessment of Waste for Landfill Disposal* set in terms of section 7(1) of the Act must be disposed to a licensed landfill as follows:

Waste Type	Landfill Disposal Requirements
Type 0 Waste	The disposal of Type 0 waste to landfill is **not allowed**. The waste must be treated and re-assessed in terms of the *Norms and Standards for Assessment of Waste for Landfill Disposal*.
Type 1 Waste	Type 1 waste may only be disposed of at a **Class A** landfill designed in accordance with section 3(1) and (2) of these Norms and Standards, or, subject to section 3(4) of these Norms and Standards, may be disposed of at a landfill site designed in accordance with the requirements for a **Hh / HH landfill** as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Ed., Department of Water Affairs and Forestry, 1998).
Type 2 Waste	Type 2 waste may only be disposed of at a **Class B** landfill designed in accordance with section 3(1) and (2) of these Norms and Standards, or, subject to section 3(4) of these Norms and Standards, may be disposed of at a landfill site designed in accordance with the requirements for a **GLB+ landfill** as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Ed., DWAF, 1998).
Type 3 Waste	Type 3 waste may only be disposed of at a **Class C** landfill designed in accordance with section 3(1) and (2) of these Norms and Standards, or, subject to section 3(4) of these Norms and Standards, may be disposed of at a landfill site designed in accordance with the requirements for a **GLB+ landfill** as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Ed., DWAF, 1998).
Type 4 Waste	Type 4 waste may only be disposed of at a **Class D** landfill designed in accordance with section 3(1) and (2) of these Norms and Standards, or, subject to section 3(4) of these Norms and Standards, may be disposed of at a landfill site designed in accordance with the requirements for a **GLB- landfill** as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Ed., DWAF, 1998).

(2) Waste listed in section 2(a) of Annexure 1 to the Regulations and destined for disposal to landfill must be disposed of as follows—

Listed Waste	Landfill Disposal Requirements
(i) Domestic waste. **(ii) Business waste not containing hazardous waste or hazardous chemicals.** **(iii) Non-infectious animal carcasses.** **(iv) Garden waste.**	Disposal only allowed at a **Class B** landfill designed in accordance with section 3(1) and (2) of these Norms and Standards, or, subject to section 3(4) of these Norm and Standards, at a landfill site designed in accordance with the requirements for a **GLB+ landfill** as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Ed., DWAF, 1998).
(v) Post-consumer packaging. **(vi) Waste tyres.**	Disposal only allowed at a **Class C** landfill designed in accordance with section 3(1) and (2) of these Norms and Standards, or, subject to section 3(4) of these Norms and Standards, at a landfill site designed in accordance with the requirements for a **GLB+ landfill** as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Ed., DWAF, 1998).
(vii) Building and demolition waste not containing hazardous waste or hazardous chemicals. **(viii) Excavated earth material not containing hazardous waste or hazardous chemicals.**	Disposal allowed at a **Class D** landfill designed in accordance with section 3(1) and (2) of these Norms and Standards, or, subject to section 3(4) of these Norms and Standards, at a landfill site designed in accordance with the requirements for a **GLB- landfill** as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Ed., DWAF, 1998).

(3) Unless assessed in terms of the *Norms and Standards for Assessment of Waste for Landfill Disposal* set in terms of section 7(1) of the Act and disposed of in terms of section 4(1) of these Norms and Standards, the following wastes included in section 2(b) of Annexure 1 to the Regulations and destined for disposal to landfill must be disposed of as follows—

Listed Waste	Landfill Disposal Requirements
(i) Asbestos Waste. **(ii) Expired, spoilt or unusable hazardous products.**	Disposal only allowed at a **Class A** landfill designed in accordance with section 3(1) and (2) of these Norms and Standards, or, subject to section 3(4) of these Norms and

(iii) PCBs (or rather PCB containing waste (>50ppm)) **(iv) General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals.** **(v) Mixed, hazardous chemical wastes from analytical laboratories and laboratories from academic institutions in containers less than 100 litres.**	Standards, at a landfill site designed in accordance with the requirements for a **Hh / HH landfill** as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Ed., DWAF, 1998).

(4) Waste that has been classified in terms of the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (2nd Edition, 1998; Department of Water Affairs and Forestry) prior to the Regulations coming into operation, may be accepted and disposed of as set out below for a period not exceeding three (3) years after the date of coming into operation of the Regulations—

Waste	Landfill Disposal Requirements
Hazardous Waste – Hazard Rating 1 or 2	Disposal only allowed at a **Class A** landfill designed in accordance with Section 3(1) and 3(2) of these Norms and Standards, or, subject to Section 3(4) of these Norms and Standards, at a landfill site designed in accordance with the requirements for a **HH landfill** as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Ed., DWAF, 1998).
Hazardous Waste – Hazard Rating 3 or 4	Disposal only allowed at a **Class A** landfill designed in accordance with section 3(1) and (2) of these Norms and Standards, or, subject to section 3(4) of these Norms and Standards, at a landfill site designed in accordance with the requirements for a **Hh landfill** as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Ed., DWAF, 1998).
Hazardous Waste – Delisted	Disposal only allowed at a **Class B** landfill designed in accordance with section 3(1) and (2) of these Norms and Standards, or, subject to section 3(4) of this Norms and Standards, at a landfill site designed in accordance with the requirements for a **GLB+ landfill** as specified in the Minimum Requirements for Waste

	Disposal by Landfill (2nd Ed., DWAF, 1998).
General Waste	Disposal only allowed at a **Class B** landfill designed in accordance with Section 3(1) and (2) of these Norms and Standards, or, subject to Section 3(4) of these Norms and Standards, at a landfill site designed in accordance with the requirements for a general waste site, **G S/M/L B-/B+** as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Ed., DWAF, 1998).

(5) Notwithstanding the requirements of section 4(1), (2) and (3) of these Norms and Standards, waste may be disposed of at landfills with a higher level of containment design than specified, subject to the restriction in section 5(2)(a)(ii) of these Norms and Standards.

Waste Disposal Restrictions

5. (1) The following prohibitions and restrictions on the disposal of waste to landfill comes into effect after the timeframes indicated for each waste from the date of the Regulations coming into operation—

Waste Prohibited or Restricted in terms of Disposal	Compliance Timeframe
(a) Waste which, in the conditions of a landfill, is explosive, corrosive, oxidizing (according to SANS 10234 or SANS10228).	Immediate
(b) Waste with a pH value of <6 or >12.	Immediate
(c) Flammable waste with a closed cup flashpoint lower than 61° Celsius.	Immediate
(d) Reactive waste that may react with water, air, acids or components of the waste, or that could generate unacceptable amounts of toxic gases within the landfill.	Immediate
(e) Waste compressed gases (according to SANS 10234 or SANS 10228).	Immediate
(f) Untreated Healthcare Risk Waste (HCRW).	Immediate
(g) (i) POPs pesticides listed under the Stockholm Convention. (ii) Other waste pesticides.	Eight (8) years Four (4) years
(h) Lead acid batteries.	Immediate
(i) Other batteries.	Eight (8) years
(j) Re-usable, recoverable or recyclable used lubricating mineral oils, as well as oil filters, but excluding other oil containing wastes.	Four (4) years

Waste Prohibited or Restricted in terms of Disposal	Compliance Timeframe
(k) Re-usable, recoverable or recyclable used or spent solvents.	Five (5) years
(l) PCB containing wastes (>50 mg/kg or 50 ppm).	Five (5) years
(m) Hazardous Waste Electric and Electronic Equipment (WEEE) – Lamps.	Three (3) years
(n) Hazardous Waste Electric and Electronic Equipment (WEEE) – Other.	Eight (8) years
(o) Waste tyres: Whole.	Immediate
(p) Waste tyres: Quartered.	Five (5) years
(q) Liquid waste– (i) Waste which has an angle of repose of less than 5 degrees, or becomes free-flowing at or below 60 °C or when it is transported, or is not generally capable of being picked up by a spade or shovel; or (ii) Waste with a moisture content of >40% or that liberates moisture under pressure in landfill conditions, and which has not been stabilised by treatment.	Six (6) years
(r) Hazardous waste with a calorific value of: (i) > 25 MJ/kg. (ii) > 20 MJ/kg. (iii) > 10 MJ/kg. (iv) > 6% TOC.	 Four (4) years Six (6) years Twelve (12) years Fifteen (15) years
(s) Brine or waste with a high salt content (TDS > 5%), and a leachable concentration for TDS of more than 100 000 mg/l.	Eight (8) years
(t) Disposal of garden waste: (i) 25% diversion from the baseline at a particular landfill of separated garden waste. (ii) 50% diversion from the baseline at a particular landfill of separated garden waste	 Five (5) years Ten (10) years
(u) Infectious animal carcasses and animal waste.	Immediate

(2) The following prohibitions and restrictions on activities related to the disposal of waste to landfill comes into effect after the timeframes indicated for each activity from the date of the Regulations taking effect—

Prohibited or Restricted Waste Disposal Activities	Timeframe
(a) Disposal of– (i) Type 1 Waste that has been treated, with waste listed in	 Five (5) years

	paragraph (2)(a) of Annexure 1 to the Regulations; (ii) Waste classified as hazardous in terms of regulation 4(1), or waste listed in paragraph (2)(b) of Annexure 1 to the Regulations, with waste listed in paragraph (2)(a) of Annexure 1 to the Regulations; and (iii) Type 4 Waste with any waste other than Type 4, unless part of treatment.	Five (5) years Five (5) years
(b)	Macro-encapsulation of waste, meaning the isolation (or long-term storage) of waste through containment in containers within a sealed or reinforced cell in a specifically prepared and engineered area within a permitted hazardous waste landfill.	Eight (8) years

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