

**DEPARTMENT OF WATER AFFAIRS AND FORESTRY**

**DEPARTEMENT VAN WATERWESE EN BOSBOU**

No.

2001

**DIRECTIONS IN TERMS OF SECTION 20(5)(b) OF ENVIRONMENT CONSERVATION ACT, 1989 (ACT 73 OF 1989) WITH REGARD TO THE CONTROL AND MANAGEMENT OF GENERAL COMMUNAL AND GENERAL SMALL WASTE DISPOSAL SITES**

By virtue of the powers vested in me by section 20(5)(b) of the Environment Conservation Act, 1989 (Act 73 of 1989) I, Ronold Kasrils, issue the directions with regard to the control and management of general communal and general small waste disposal sites as set out in the Schedule hereunder.

MINISTER OF WATER AFFAIRS AND FORESTRY

DATE:

**SCHEDULE**

**1. DEFINITIONS**

In these directions, unless the context otherwise indicates, a word or expression to which a meaning has been assigned in terms of the Environment Conservation Act, 1989 (Act 73 of 1989), (hereinafter referred to as "the Act") shall have the same meaning, and

"aquifer" means a water-bearing strata of fractured or permeable rock, sand or gravel;

"climatic water balance calculation" is the climatic water balance obtained by using the formula  $B = R - E$ , where B is the climatic water balance in millimetres of water, R is the rainfall in millimetres of water and E is the evaporation from a soil surface in millimetres of water, as fully explained in the Minimum Requirements for Waste Disposal by Landfill (Second Edition 1998), published by the Department of Water Affairs and Forestry and as amended from time to time.

(The calculation is used only to indicate the climatic conditions under which leachate management is needed, on account of the generation of significant leachate.)

"Department" means the Department of Water Affairs and Forestry;

"effective fence" is a fence constructed and erected in order to:

- (a) prevent any unauthorised or illegal access and dumping at the site;
- (b) prevent removal of waste from the site;

- (c) prevent access of milk or meat production animals to the site; and
- (d) curtail the spreading of wind-blown paper and plastic material;

"general communal waste disposal site (G:C:B<sup>-</sup> and G:C:B<sup>+</sup>)" in these directions means a disposal site -

- a) which receives only general waste;
- b) which receives less than 25 tons of general waste per day;
- c) which does not have any of the fatal flaws as set out in the in the Minimum Requirements for Waste Disposal by Landfill (Second Edition 1998), published by the Department of Water Affairs and Forestry and as amended from time to time.

"general small waste disposal sites with a negative climatic water balance (G:S:B<sup>-</sup>)" in these directions means a disposal site

- a) which receives only general waste;
- b) where no significant leachate will be generated in terms of the climatic water balance in order that a leachate management system is not required;
- c) which receives more than 25 tons but less than 150 tons of general waste per day; and
- d) which does not have any of the fatal flaws as set out in the in the Minimum Requirements for Waste Disposal by Landfill (Second Edition 1998), published by the Department of Water Affairs and Forestry and as amended from time to time.

"general waste" means waste that does not pose an immediate threat to human life or the environment, and includes such waste as household waste, builders' rubble, garden waste, dry industrial and commercial waste. It may, however, with decomposition, infiltration and percolation, produce leachate with an unacceptable pollution potential. These wastes can create odour, fly or other nuisances.

"landfill" when used as a verb (v) means to dispose of waste on land, whether by use of waste to fill in excavations or by creation of a landform above ground, where the term "fill" is used in the engineering sense;

"landfill" when used as a noun (n) means the waste body created by landfilling. This may be above ground or below ground, or both;

"leachate" means an aqueous solution with a high pollution potential, which mainly results when water is permitted to percolate through decomposing waste.

It contains final and intermediate products of decomposition, various solutes and waste residues;

"leachate generating disposal site" refers to a disposal site which may receive general waste

only and where the Climatic Water Balance (B) is positive for more than one year in five for the years for which data is available;

"non-leachate generating disposal site" means a disposal site which is not a leachate generating disposal site;

"Regional Director" means a Regional Director of the Department of Water Affairs and Forestry in whose jurisdiction the waste disposal site is situated;

"registered person" refers to the person who, in terms of section 20(1) of the Act is legally responsible for the site, both during operation and after closure;

"responsible person" means a person(s) who takes professional responsibility for ensuring that all or some of the facets of any of the following are properly directed, guided and executed, in a professionally justifiable manner: investigatory work, design, preparation, operation, closure and monitoring;

"suitably qualified person" means a person other than the "responsible person" who is qualified or has experience in the management of waste disposal sites which is to the satisfaction of the Regional Director or a person delegated by him or her.

#### **REGISTRATION OF GENERAL COMMUNAL (G:C:B<sup>-</sup> AND G:C:B<sup>+</sup>) AND GENERAL SMALL (G:S:B) DISPOSAL SITES:**

- 2(1) A person or body who wishes to establish and/or develop, operate, close and rehabilitate a general communal or a general small waste disposal site (hereafter referred to as "the Site") with a negative water balance must register the Site in the format as set out in Annexure A.
- (2) Registration in terms of subparagraph (1) authorises the establishment, development and operation of these Sites in terms of these directions.

#### **LOCATION**

3. The location of the Site shall be according to the co-ordinates indicated on the application form for registration submitted by the registered person.

#### **PERMISSIBLE WASTE**

- 4(1) The Site may be used for the disposal of waste types in quantities contained in the definition for a general communal sites (G:S:B<sup>+</sup> and G:S:B<sup>-</sup>) and general small sites with a negative climatic water balance (G:S:B<sup>-</sup>) and which are classified according to the Minimum Requirements for Waste Disposal by Landfill (Second Edition 1998), published by the Department of Water Affairs and Forestry and as amended from time to time, but excludes waste types listed in Annexure B.
- (2) The registered person must take all measures to ensure that-
  - (a) no medical waste is disposed of on the Site; and

(b) no scheduled pharmaceutical products registered in terms of the Medicines and Related Substances Control Act, 1965 (Act 101 of 1965) or associated containers are disposed of on the Site.

. **PLANNING, DESIGN, CONSTRUCTION AND COMMISSIONING**

- 5(1) The planning of the Site and its design, construction and commissioning shall be in accordance with the Minimum Requirements for Waste Disposal by Landfill (Second Edition 1998), published by the Department of Water Affairs and Forestry and as amended from time to time.
- (2) The Site or any portion of a Site may only be used by the registered person for the disposal of permissible waste if the Site or any such portion has been constructed or developed according to the conditions set out in subparagraph (4) of this section.
- (3) The construction and further development of the Site must be implemented by the registered person under the supervision of a suitably qualified person approved of by the Regional Director or a person delegated by him or her.
- (4) New sites must comply as follows:
- (a) Before disposal may commence on the Site after construction of the Site, the Regional Director or somebody delegated by him or her must be notified and the person referred to in subparagraph (3) must submit a certificate or a letter to the Regional Director that the construction of the Site is in accordance with recognised civil engineering practice.
  - (b) The completed construction works of the Site must be inspected by an official of the Department and the person referred to in subparagraph (3).
  - (c) If the Regional Director or the person delegated by him or her is satisfied with the construction of the Site upon written permission, the registered person may use the Site or any further development within the Site for the disposal of waste.
- (5) Should a portion of the Site at any stage be extended, the registered person must notify the Regional Director or a person delegated by him or her of such a development and-
- (a) Before disposal may commence on that portion of the Site, the Regional Director or somebody delegated by him or her must be notified and the person referred to in subparagraph (3) must submit a certificate or a letter to the Regional Director that the construction of the extension, as proposed by the registered person and approved by the Regional Director or a person delegated by him or her, is in accordance with recognised civil engineering practice.
  - (b) The completed construction works must be inspected by an official of the Department and the person referred to in subparagraph (3).

- (c) If the Regional Director or a person delegated by him or her, is satisfied with the construction of that further development within the Site and has given written permission, the registered person may use that portion of the Site for the further disposal of waste.
- (6) A buffer zone of a minimum of 200 metres for a general communal waste disposal site and of 400 metres for a general small waste disposal site must be maintained at all times. Heavy industries or industries that may create nuisance conditions and compatible with waste disposal sites, may be permitted within the buffer zone in terms of the appropriate legislation.
- (7) Works must be constructed and maintained on a continuous basis by the registered person to-
  - (a) divert and drain from the Site all runoff water arising on land adjacent to the Site, which could be expected as a result of the estimated maximum precipitation during a period of 24 hours with an average frequency of once in fifty years (hereinafter referred to as the "estimated maximum precipitation") in compliance with relevant legislation.
  - (b) under the rainfall event referred to in subparagraph (a), maintain a freeboard of half a metre.
  - (c) divert and drain from the working face of the Site, all runoff water arising on the Site, which could be expected as a result of the estimated maximum precipitation; and
  - (d) to prevent such runoff water from coming into contact with leachate from the Site.
- (8) Runoff water referred to in subparagraph (7) must comply with the quality requirements of the General Standard as published in Government Notice 991 of 18 May 1984, or with such quality requirements as may from time to time be determined by the Minister.
- (9) Runoff water referred to in subparagraph (7) that does not comply with the quality requirements applicable in terms of paragraph (8) and all sporadic leachate from the Site must by means of works which must be constructed and maintained on a continuous basis by the registered person, with the written approval of the Regional Director or a person delegated by him or her, be evaporated in dams and/or evaporated by spraying over those portions of the Site which comply with the requirements set in terms of subparagraph (2) of this section and/or other approved method of disposal.
- (10) The Site must be constructed in accordance with recognised civil engineering practice to ensure that it remains stable.
- (11) The maximum height of the Site above ground level must not exceed three (3) metres.
- (12) The slope of the sides of the Site must be constructed in such a manner that little or no erosion occurs.
- (13) The registered person must make provision for adequate sanitation facilities on the Site.

## **ACCESS CONTROL**

- 6(1) Weatherproof, durable and legible notices in the official languages applicable in the area must be displayed at each entrance to the Site which prohibits unauthorised entry and include the hours of operation, the name, address and telephone number of the registered person and the person responsible for the operation of the Site.
- (2) The Site must be effectively fenced or otherwise secured to prevent unauthorised entry.
- (3) The registered person must
  - (a) take steps to maintain service roads in a condition which ensures unimpeded access to the Site for vehicles transporting waste and to keep the roads free of waste;
  - (b) ensure that all entrance gates are locked outside the hours of operation;
  - (c) ensure effective access control; and
  - (d) take all reasonable steps to prevent the disposal of waste on the Site for which the Site has not been approved.

## **OPERATION**

- 7(1) Waste disposal and operation must be implemented according to the relevant minimum requirements and any other written instructions by the Department.
- (2) Waste disposed of on the Site must be compacted and covered on a daily basis with a minimum of 150 millimetres of soil or other material approved by the Regional Director or a person delegated by him or her.
- (3) Burning of waste will only be allowed on the Site if it is motivated by a written submission to the satisfaction of the Regional Director that it does not have a detrimental impact on the environment and operation of the Site.
- (4) Disposal of dead animals, rejected carcasses, parts of dead animals, contaminated food, food rests or any edible material must be immediately carried out when brought onto the Site by burying it in trenches and covered with at least 500 millimetres soil or other material approved by the Regional Director or a person delegated by him or her.
- (5) The registered person must take steps to ensure that the Site is operated in a manner that will prevent the creation of nuisance conditions or health hazards.
- (6) The registered person must apply sufficient dust control measures to prevent wind-blown dust from causing nuisance conditions or health hazards.
- (7) Operations must take place in trenches or in cells with the working face not greater than 10 metres by 10 metres.

- (8) Waste disposed of on the Site may be reclaimed provided that it is carried out in a controlled manner and approved by the responsible health authority. The reclamation activity must not interfere with the daily operational activities of the Site.
- (9) Wind-blown litter leaving the Site must be collected on a daily basis.
- (10) Adequate provision must be made on Site for drinking water, sanitation and ablution facilities for workers.

## 8. **MONITORING**

### (1) **WATER MONITORING**

General small sites with a negative climatic water balance (G:S:B<sup>-</sup>) must comply with Sections 8 and 9 of these directions:

- (a) The registered person must establish a monitoring borehole network, consisting of an upstream and a downstream borehole for the Site, to the satisfaction of the Regional Director, so that unobstructed sampling, as required in terms of these directions, can be undertaken.

### (2) **BACKGROUND MONITORING**

- (a) Samples from the upstream borehole where the groundwater in the borehole is at an expected higher hydraulic pressure level than the hydraulic pressure level of the groundwater under the Site, shall be considered as background monitoring.
- (b) Background monitoring shall be conducted on a six monthly basis for the water quality variables as listed in Annexure C hereto and reported to the Regional Director within 30 days from the date of sampling.

### (3) **DETECTION MONITORING**

- (a) Detection Monitoring shall be conducted six monthly at the downstream borehole for the water quality variables listed in Annexure D and reported to the Regional Director within 30 days from the date of sampling.

## **REPORTING**

- 9. The registered person must keep a record of and update all the information referred to in Annexure E within a period of one year from the date of this Registration and annually thereafter.

## **CLOSURE AND REHABILITATION OF THE SITE**

- 10 The registered person must notify the Regional Director by registered mail within 180 days prior to the intended closure of the Site and submit final rehabilitation plans for his approval. These plans must be in accordance with the Minimum Requirements for Waste Disposal by Landfill (Second Edition 1998), published by the Department of Water Affairs and Forestry and as amended from time to time.

. **LEASING AND ALIENATION OF THE SITE**

- 11(1) Should the registered person wish to alienate or lease the Site, he or she must notify the Regional Director in writing of such an intention at least 120 days prior to the said transaction.
- (2) Any new owner of the Site must apply for re-registration of the Site.

**OFFENCES AND PENALTIES**

- 12 Any person who contravenes any provision of this direction or fails to comply therewith shall be guilty of an offence and liable on conviction to the penalties contained in section 29(4) of the Act.

. **GENERAL**

- 13(1) The registered person must together with the application for Registration of the Site, provide written confirmation from the Local or Regional Authority that waste disposal is allowed on the Site in terms of Local or Regional Planning Schemes.
- (2) These directions do not exempt the registered person from any relevant regulations promulgated under the Act or any other relevant legislation. Proof of exemption and /or Record of Decisions must be submitted to the Regional Director.
- (3) If the Site is an existing Site and not zoned for waste disposal, and if consent cannot be provided by the Local or Regional Authority for waste to be disposed on the Site, the registered person must within a period of 60 days following the application for registration, apply for the rezoning of the Site for waste disposal purposes.
- (4) Such application must be successfully completed within a period of two (2) years, failing which the registered person must comply with subparagraph (10).
- (5) The Minister may at any time amend, extend, or withdraw these directions.

**ANNEXURE A**

APPLICATION FOR REGISTRATION OF GENERAL COMMUNAL (G:S:B<sup>+</sup> and G:S:B<sup>-</sup>) AND GENERAL SMALL (G:S:B<sup>-</sup>) WASTE DISPOSAL SITE UNDER SECTION 20 (5) OF THE ENVIRONMENT CONSERVATION ACT, 1989 (ACT 73 OF 1989), AND EXEMPTION FROM OBTAINING A PERMIT FOR THE SITE UNDER SECTION 20 (1) OF THE ENVIRONMENT CONSERVATION ACT, 1989 (ACT 73 OF 1989)

For official use only Quaternary Drainage Region (e.g. C201) ..... File No.: ..... Item No.: .....
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**(\* Indication with an X**

**SECTION A**

1. Name of disposal site:  
.....

2. (a) Disposal site (\*): Proposed  Existing

3. Full name of Registering Person:  
.....

Postal address  
.....

Telephone code & No.: ..... Fax Code & No.: ..... Postal code:.....

4. Registered owner(s) of property on which disposal site is situated:

Full name:  
.....

Postal address  
.....

Telephone code & No.: ..... Fax Code & No.: ..... Postal  
code:.....

5. Nomination for suitably qualified person:

Name:  
.....

Postal Address:  
.....

Telephone Code & No.:.....Fax Code & No.:.....Postal  
Code.....

6. Location of property on which existing or proposed disposal site is situated:

Latitude:  °  '  "      Longitude:  °  '  "

Magisterial district .....

Municipal area within which disposal site is located (if any) .....  
.....

Name of local authority within whose jurisdiction the disposal site is located (for example  
Regional Services Council or Local Government Affairs Council)

.....

7. (a) Deeds Act description of property on which disposal site is situated (use further  
lines if necessary):

Example: Portion 49 (portion of Portion 27) of the farm Brandbach 471 JR

.....

(b) Extent of total property: ..... hectares

(c) Extent of disposal site: ..... hectares

8. Local authority in whose jurisdiction the disposal site is situated (select the authority in item 6  
which is more directly involved with the disposal site).

Full name: .....

Postal address .....

Telephone code & No.: ..... Fax Code & No.: ..... Postal code:.....

9. Name of person in direct control of the disposal site (responsible person):

.....

Identity ..... No.:

.....

Telephone code & No.: ..... After hours

.....

Fax Code &No.:.....

**SECTION B**

10. Indicate which of the following apply to the disposal site (\*):

- (a) Within a 3 000 m radius of the end of an airport landing strip.
- (b) Within the 1 in 50 year flood line of any watercourse.
- (c) Within an unstable area (fault zone, seismic zone, dolomitic area, sinkholes).
- (d) Within the drainage area or within 5 km of a water source.
- (e) Within an area with a shallow and/or visible watertable.
- (f) Within an area adjacent to or above an aquifer.
- (g) Within an area with shallow bedrock and limited available cover material
- (h) Within 100 m of a source of surface water.
- (i) Within 1 km from a wetland.

Yes	No

- (j) Indicate the distance to the boundary of the nearest residential area: ..... metres
- (k) Indicate the distance to the boundary of the nearest industrial area: ..... metres
- (l) Indicate the distance from the waste disposal site to the nearest present or expected future borehole, which is in use:.....metres
- (m) If a borehole (s) such as that mentioned in (l) exist (s). describe the use of this water.....

11. (a) Indicate prevailing wind direction (e.g. NNW) (\*):

November - April

May - October


(b) Indicate the wettest six months of the year (\*):

November - April

May - October


(c) For the wettest six months period indicate in 10(b), indicate the following for the preceding 30 years:

	Total rainfall for 6 months	Total A-pan evaporation for 6 months	Official use (B)
For the wettest year	.....	.....	
For the 2nd wettest year	.....	.....	
For the 3rd wettest year	.....	.....	

For the 4th wettest year	.....	.....	
For the 5th wettest year	.....	.....	
For the 6th wettest year	.....	.....	
For the 7th wettest year	.....	.....	
For the 8th wettest year	.....	.....	
For the 9th wettest year	.....	.....	
For the 10th wettest year	.....	.....	

12. Indicate the size of the population to be served by the disposal site (\*):

0	-	499	
500	-	9 999	
10 000	-	199 999	
200 000	Upwards		

<p>For official use only</p> <p>Classification:</p> <p>.....</p>
--

13. Detailed location of waste disposal site. Indicate the latitude and longitude of the features as required (these points must also be indicated on the maps and orthophotos required under items 20 and 21):

(a) Description of the external corner points of the disposal site:

Number of corner	Latitude			Longitude		
.....	°	'	"	°	'	"
.....						
.....	°	'	"	°	'	"
.....						
.....	°	'	"	°	'	"
.....						
.....	°	'	"	°	'	"
.....						
.....	°	'	"	°	'	"
.....						
.....	°	'	"	°	'	"
.....						

(a) Indicate the expected lifetime of the disposal site .....  
years.

- (b) Indicate the appropriate type of waste and list the estimated quantities expected to be disposed of daily.

Non-hazardous waste

Type of waste:	Quantity (ton per day)
Household refuse	.....
Garden refuse	.....
Building rubble	.....
Industrial (non hazardous)	.....
(Other: Specify)	
- (a) .....	.....
- (b) .....	.....
- (c) .....	.....
- (d) .....	.....
	TOTAL .....

- (c) Source of information supplied in 14(b) (\*):

Determined from volumes	<input type="checkbox"/>
Determined with weighbridge	<input type="checkbox"/>

Estimated

(d) Method of estimation:  
 .....

15. (a) Indicate the salvage method to be employed (\*):

At source	<input type="checkbox"/>
Recycling installation	<input type="checkbox"/>
Informal salvaging	<input type="checkbox"/>
Formal salvaging	<input type="checkbox"/>
Contractor	<input type="checkbox"/>
No salvaging planned	<input type="checkbox"/>

(b) Indicate the applicable waste types and quantities expected to be disposed and salvaged annually (\*):

Type	Quantity (ton)		Type	Quantity (ton)	
	<u>Disposed</u>	<u>Salvaged</u>		<u>Disposed</u>	<u>Salvaged</u>
<input type="checkbox"/> Paper/wood fibre	.....	.....	<input type="checkbox"/> Rubber	.....	.....
<input type="checkbox"/> Plastics	.....	.....	<input type="checkbox"/> Textiles	.....	.....
<input type="checkbox"/> Glass	.....	.....	<input type="checkbox"/> Iron	.....	.....
<input type="checkbox"/> Copper	.....	.....	<input type="checkbox"/> Aluminium	.....	.....
<input type="checkbox"/> Zinc	.....	.....	<input type="checkbox"/> Lead	.....	.....
<input type="checkbox"/> Phosphogypsum	.....	.....	<input type="checkbox"/> Fly-ash	.....	.....
<input type="checkbox"/> Waste for	.....	.....	<input type="checkbox"/> § Food residues	.....	.....

	composting		
	Flammable gases .....	Other .....	
	Other .....	Other .....	

**§ NOTE: Food residues may not be salvaged for human consumption**

16. (a) Indicate the method of disposal of waste (\*):

Area method		Trenching		Ramp	
			method		

(b) Indicate the dimensions of the disposal site in metres.

	At commencement	After rehabilitation
Height/Depth	.....	.....
Length	.....	.....
Breadth	.....	.....

(c) Indicate the total volume available for the disposal of waste on the site (\*):

m <sup>3</sup>		<u>Source of information:</u>	
Up to 99		Determined by surveyor	
100 - 34 999		Estimated	
35 000 - 3,5 million			
> 3,5 million			

(d) Indicate the total volume already used for waste disposal:

.....

		Yes	No	
17.	(a)	Will waste be covered daily? (*):	<input type="checkbox"/>	<input type="checkbox"/>
	(b)	Is sufficient cover material available? (*):	<input type="checkbox"/>	<input type="checkbox"/>
	(c)	Will waste be compacted daily? (*):	<input type="checkbox"/>	<input type="checkbox"/>

- (d) If the answers on paragraph 17(a) and/or 17(b) are **No**, what measures will be employed to prevent the problems of burning or smouldering of waste as the generation of nuisances?

.....  
.....  
.....  
.....  
.....  
.....  
.....

18. (a) Indicate the current use of land adjacent to the disposal site and the property on which it is situated (\*):

Industrial	<input type="checkbox"/>	Recreation	<input type="checkbox"/>
Agricultural	<input type="checkbox"/>	Commercial	<input type="checkbox"/>
Residential	<input type="checkbox"/>	Mining & quarrying	<input type="checkbox"/>
Forestry	<input type="checkbox"/>	Wilderness areas	<input type="checkbox"/>
Wetlands	<input type="checkbox"/>	Nature areas	<input type="checkbox"/>
Open spaces	<input type="checkbox"/>		

Other.....

- (b) Indicate the approved zoning of the land adjacent to the disposal site and the property on which it is situated. (This information must also be indicated on the topo-cadastral map) (\*):

Industrial	<input type="checkbox"/>	Recreation	<input type="checkbox"/>
Agricultural	<input type="checkbox"/>	Commercial	<input type="checkbox"/>
Residential	<input type="checkbox"/>	Mining & quarrying	<input type="checkbox"/>

Forestry	<input type="checkbox"/>	Wilderness areas	<input type="checkbox"/>
Wetlands	<input type="checkbox"/>	Nature areas	<input type="checkbox"/>
Open spaces	<input type="checkbox"/>		

Other.....

19. Indicate the geological formations underlying the disposal site (\*):

Granite	<input type="checkbox"/>	Quartzite	<input type="checkbox"/>
Shale	<input type="checkbox"/>	Dolomite	<input type="checkbox"/>
Sandstone	<input type="checkbox"/>	Dolerite	<input type="checkbox"/>

Other.....

**SECTION C**

20. Provide a topocadastral map (1:50 000) indicating the location of the following, where present, within 5 km radius of the site boundary :

- (a) Disposal site.
- (b) The area served.
- (c) Existing residential and industrial areas.
- (d) Possible future development (indicate the type of development).
- (e) Routes used in transport of waste.
- (f) Other disposal sites (existing or closed) in the area.
- (g) Zoning and land use of the disposal site and the surrounding area within a 5 km radius.
- (h) The 1 in 50 year floodline of all watercourses.

21. Boundaries a plan (1:5 000) and orthophoto (1:10 000, if available) of the disposal site and surrounding area to a distance of one kilometre from the disposal site, indicating thereon §:

- (a) Boundaries of the disposal site.



## ANNEXURE B

### **LIST OF HAZARDOUS OR TOXIC MATERIALS WHICH MAY NOT BE DISPOSED OF ON A GENERAL COMMUNAL AND GENERAL SMALL WASTE DISPOSAL SITES**

1. Waste where specific control has been established in terms of the Nuclear Energy Act, 1993 (Act 131 of 1993).
2. Waste types controlled in terms of the Minerals Act, 1991 (Act 50 of 1991) and the Electricity Act, 1987 (Act 41 of 1987), unless written permission has been obtained from the Regional Director.
3. Waste as described in the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (Second Edition 1998) as published by the Department of Water Affairs and Forestry and as amended from time to time (Minimum Requirements), as an extreme hazard or Hazard Group 1 (HG1); high hazard or Hazard Group 2 (HG2); moderate hazard or Hazard Group 3 (HG3) and low hazard or Hazard Group 4 (HG4).
4. Flammable wastes, with a closed cup flash point less than 61°C.
5. Corrosive substances, as described in the Minimum Requirements as Class 8 (1998 edition: page 6-8, Diagram III).
6. Oxidising substances and organic peroxides, as described in the Minimum Requirements as Class 5 (1998 edition: page 6-8, Diagram III).
7. Any waste with a substance which is a Group A and/or Group B carcinogen/mutagen. Group A carcinogens/mutagens have been proven in humans, both clinical and epidemiological. Group B carcinogens/mutagens have been proven without doubt in laboratory animals.
8. Any waste with a substance at a concentration greater than 1% where the substance is a Group C and/or Group D carcinogen/mutagen. Group C carcinogens/mutagens have shown limited evidence in animals. Group D carcinogen/mutagen - the available data is inadequate and doubtful.
9. Any infectious waste. Infectious waste is waste which is generated during the diagnosis, treatment or immunisation of humans or animals; in the research pertaining to this; in the manufacturing or testing of biological agents including blood, blood products and contaminated blood products, cultures, pathological wastes, sharps, human and animal anatomical wastes and isolation wastes that contain or may contain infectious substances.
10. All materials which falls in Class 1 (explosives), Class 2 (compressed gases) and Class 7 (radioactive materials), as described in the Minimum Requirements.
11. Any waste with a pH less than 6 or greater than 12.
12. Any waste which is difficult to analyse and classify.
13. Any complexes of heavy metal cations, paint and paint sludge, or laboratory chemicals.

## ANNEXURE C

### **WATER QUALITY VARIABLES REQUIRED FOR BACKGROUND MONITORING** **SECTION 8 PARAGRAPH (2)**

Alkalinity (P.Alk)	Free & saline ammonia as N (NH <sub>4</sub> -N)
Calcium (Ca)	Boron (B)
Chromium (hexavalent) (Cr <sup>6+</sup> )	Magnesium (Mg)
Chromium (Total) (Cr)	Cadmium (Cd)
Chemical oxygen demand (COD)	Chloride (Cl)
Cyanide (CN)	Mercury (Hg)
Lead (Pb)	pH
Nitrate (as N) (NO <sub>3</sub> -N)	Sodium (Na)
Phenolic compounds (Phen)	Electrical conductivity (EC)
Potassium (K)	Sulphate (SO <sub>4</sub> )
Total dissolved solids (TDS)	

## ANNEXURE D

### **WATER QUALITY VARIABLES REQUIRED FOR DETECTION MONITORING: SECTION 8 PARAGRAPH (3)**

- (a) Alkalinity (P.Alk)  
Chemical oxygen demand (COD)  
pH  
Total dissolved solids (TDS)  
Chlorides (Cl)  
Nitrate (NO<sub>3</sub>-N)  
Potassium (K)
  
- (b) Annually for electrical conductivity (EC), calcium (Ca), magnesium (Mg), sodium (Na), sulphate (SO<sub>4</sub>) and fluoride (F).

**ANNEXURE E**

**INFORMATION WHICH SHALL BE SUBMITTED ON AN ANNUAL BASIS**

NAME OF SITE: \_\_\_\_\_ DATE OF REPORT: (y/m/d)

1. Registered owner(s) of property on which disposal site is situated:

Name.....

Postal Address..... Telephone Code & No .....

..... Fax Code &No.....

..... Postal Code..... Telex No.....

2. Name of Responsible Person in control of disposal site:

.....

Telephone code & number .....After hours .....

Identity number.....

3. (a) Latest estimated remaining lifetime of the disposal site .....yrs

(b) Indicate the approximate quantities of waste disposed during the past 12 months:.....ton

**\* Indicate with an X**

4. (a) **Indicate the method of disposal of waste (\*)**.

Rampmethod.....Area method..... Trenching.....

(b) Indicate the present dimensions of the site in metres.

Height/depth .....

Length .....

Breadth .....

Signature.....

Capacity.....

Place..... Date.....