

CITY OF CAPE TOWN

WASTEWATER AND INDUSTRIAL  
EFFLUENT BY-LAW

APPROVED BY COUNCIL : 31 MAY 2006  
C 32/05/06

PROMULGATED 1 SEPTEMBER 2006  
PG 6378; LA 18367

## Provincial Gazette

6378

Friday, 1 September 2006

Registered at the Post Office as a Newspaper

## CONTENTS—(Continued)

Page

City of Cape Town (Oostenberg Region): Rezoning and environmental assessment.....	1460
City of Cape Town (Oostenberg Region): Rezoning and environmental assessment.....	1461
City of Cape Town (Oostenberg Region): Rezoning and environmental assessment.....	1462
City of Cape Town (Oostenberg Region): Rezoning and environmental assessment.....	1463
City of Cape Town (Oostenberg Region): Closure, rezoning and environmental assessment.....	1464
City of Cape Town (Oostenberg Region): Closure, rezoning and environmental assessment.....	1465
City of Cape Town (Oostenberg Region): Closure, rezoning and environmental assessment.....	1466
City of Cape Town (Oostenberg Region): Closure, rezoning and environmental assessment.....	1467
City of Cape Town: (South Peninsula Region): Rezoning and departure.....	1468
City of Cape Town: (Tygerberg Region): Rezoning and departure.....	1469
City of Cape Town: Water By-law.....	1495
City of Cape Town: Wastewater and industrial effluent by-law....	1558
Drakenstein Municipality: Rezoning and subdivision.....	1470
George Municipality: Subdivision.....	1471
George Municipality: Closure.....	1460
George Municipality: Closure.....	1461
George Municipality: Rezoning and departure.....	1472
George Municipality: By-law relating to overgrown premises.....	1481
George Municipality: By-law relating to the impoundment of animals.....	1484
Hessequa Municipality: Rezoning, subdivision and consolidation.....	1473
Hessequa Municipality: Consent use.....	1462
Hessequa Municipality: Rezoning and subdivision.....	1474
Hessequa Municipality: Subdivision.....	1463
Knysna Municipality: Subdivision.....	1475
Matzikama Municipality: Rezoning.....	1476
Mossel Bay Municipality: Subdivision.....	1477
Mossel Bay Municipality: Rezoning.....	1478
Mossel Bay Municipality: Rezoning, subdivision and consolidation.....	1479
Overstrand Municipality: Subdivision.....	1471
Prince Albert Municipality: Subdivision.....	1472
Prince Albert Municipality: Subdivision.....	1473
Stellenbosch Municipality: Rezoning and subdivision.....	1474
Stellenbosch Municipality: Rezoning and subdivision.....	1475
Stellenbosch Municipality: Rezoning and subdivision.....	1480
Stellenbosch Municipality: Rezoning and subdivision.....	1480
Swartland Municipality: Subdivision.....	1476
Swartland Municipality: Subdivision.....	1477
Swartland Municipality: Subdivision and rezoning.....	1478
Swartland Municipality: Subdivision.....	1479

## Provinsiale Koerant

6378

Vrydag, 1 September 2006

As 'n Nuusblad by die Poskantoor Geregistreer

## INHOUD—(Vervolg)

Bladsy

Stad Kaapstad: (Oostenberg Streek): Hersonerling en omgewingsimpakbepaling.....	1460
Stad Kaapstad: (Oostenberg Streek): Hersonerling en omgewingsimpakbepaling.....	1461
Stad Kaapstad: (Oostenberg Streek): Hersonerling en omgewingsimpakbepaling.....	1462
Stad Kaapstad: (Oostenberg Streek): Hersonerling en omgewingsimpakbepaling.....	1463
Stad Kaapstad: (Oostenberg Streek): Sluiting, hersonerling en omgewingsimpakbepaling.....	1464
Stad Kaapstad: (Oostenberg Streek): Sluiting, hersonerling en omgewingsimpakbepaling.....	1465
Stad Kaapstad: (Oostenberg Streek): Sluiting, hersonerling en omgewingsimpakbepaling.....	1466
Stad Kaapstad: (Oostenberg Streek): Sluiting, hersonerling en omgewingsimpakbepaling.....	1467
Stad Kaapstad: (Suidkiereiland Streek): Hersonerling en afwyking.....	1468
Stad Kaapstad: (Tygerberg Streek): Hersonerling en afwyking.....	1469
Stad Kaapstad: Watervoorordening.....	1515
Stad Kaapstad: Verordening of afvalwater en nywerheidsuitvloei.....	1564
Drakenstein Munisipaliteit: Hersonerling en onderverdeling.....	1470
George Munisipaliteit: Onderverdeling.....	1471
George Munisipaliteit: Sluiting.....	1460
George Munisipaliteit: Sluiting.....	1461
George Munisipaliteit: Hersonerling en afwyking.....	1472
George Munisipaliteit: Verordeninge: Oorgroeide persele.....	1482
George Munisipaliteit: Verordening: insake die skut van diere....	1487
Hessequa Munisipaliteit: Hersonerling, onderverdeling en konsolidasie.....	1473
Hessequa Munisipaliteit: Vergunningsgebruik.....	1462
Hessequa Munisipaliteit: Hersonerling en onderverdeling.....	1474
Hessequa Munisipaliteit: Onderverdeling.....	1463
Knysna Munisipaliteit: Onderverdeling.....	1475
Matzikama Munisipaliteit: Hersonerling.....	1476
Mosselbaai Munisipaliteit: Onderverdeling.....	1477
Mosselbaai Munisipaliteit: Hersonerling.....	1478
Mosselbaai Munisipaliteit: Hersonerling, onderverdeling en konsolidasie.....	1479
Overstrand Munisipaliteit: Onderverdeling.....	1471
Prins Albert Munisipaliteit: Onderverdeling.....	1472
Prins Albert Munisipaliteit: Onderverdeling.....	1473
Stellenbosch Munisipaliteit: Hersonerling en onderverdeling.....	1474
Stellenbosch Munisipaliteit: Hersonerling en onderverdeling.....	1475
Stellenbosch Munisipaliteit: Hersonerling en onderverdeling.....	1480
Stellenbosch Munisipaliteit: Hersonerling en onderverdeling.....	1480
Swartland Munisipaliteit: Onderverdeling.....	1476
Swartland Munisipaliteit: Onderverdeling.....	1477
Swartland Munisipaliteit: Onderverdeling en hersonerling.....	1478
Swartland Munisipaliteit: Onderverdeling.....	1479

**CITY OF CAPE TOWN**  
**WASTEWATER AND INDUSTRIAL EFFLUENT BYLAW**

**CONTENTS**

<b>1. DEFINITIONS</b>	<b>Page 2</b>
<b>CHAPTER 1 — DUTIES AND PROHIBITED ACTS</b>	<b>Page 4</b>
2. Duties of owners of property	Page 4
3. Protection of municipal sewers	Page 4
4. Clearing of blocked private sewers	Page 6
<b>CHAPTER 2 — INDUSTRIAL EFFLUENT</b>	<b>Page 6</b>
5. Consent required to discharge industrial effluent	Page 6
6. Non-waterborne disposal of industrial effluent	Page 6
7. Charges in respect of industrial effluent	Page 7
<b>CHAPTER 3 — REPEAL AND PENALTIES</b>	<b>Page 7</b>
8. Repeal of by-laws	Page 7
9. Offences and penalties	Page 7
<b>SCHEDULE 1 — CHARGES AND QUANTITY OF INDUSTRIAL EFFLUENT</b>	<b>Page 7</b>
1. Charges in respect of industrial effluent	Page 7
2. Calculation of quantity of industrial effluent discharged	Page 8
<b>SCHEDULE 2 — PROHIBITED DISCHARGE INTO SEWERS</b>	<b>Page 10</b>
<b>SCHEDULE 3 — REPEAL OF BY-LAWS</b>	<b>Page 11</b>

**WASTEWATER AND INDUSTRIAL EFFLUENT BY-LAW**

**1. Definitions**

In this by-law:—

“**council**” means the council of the municipality of Cape Town and includes any structure, councillor, or official of the council exercising powers or performing duties or functions under this by-law, which have been delegated to such structure, councillor or official by the council;

“**industrial effluent**” means any liquid whether or not containing matter in solution or suspension, which is given off in the course of or as a result of any industrial trade, manufacturing, mining or chemical process or any laboratory, research, service, or agricultural activity, and includes matter discharged from a waste grinder;

“**municipal sewer**” means any pipe or conduit under the control of the council which may be used for the conveyance of wastewater;

“**occupier**” means a person who occupies any premises or part thereof, without regard to the title under which he or she occupies;

“**owner**” means:—

- (a) the person in whom from time to time is vested the legal title to premises;

- (b) in a case where the person in whom the legal title to premises is vested is insolvent or dead, or is under any form of legal disability whatsoever, the person in whom the administration and control of such premises is vested as curator, trustee, executor, administrator, judicial manager, liquidator or other legal representative;
- (c) in any case where the council is unable to determine the identity of such person, a person who is entitled to the benefit of the use of such premises or a building or buildings thereon;
- (d) in the case of premises for which a lease agreement of 30 years or longer has been entered into, the lessee thereof;
- (e) the person who has purchased immovable property from the municipality, in terms of a scheme that allows for the purchase price to be paid in installments and who has not received transfer from the municipality;
- (f) in relation to:—
  - (i) a piece of land delineated on a sectional plan registered in terms of the Sectional Titles Act, 1986 (Act 95 of 1986), the developer or the body corporate in respect of the common property, or
  - (ii) a section as defined in such Act, the person in whose name such section is registered under a sectional title deed; and includes the lawfully appointed agent of such a person;

“**person**” includes a juristic person;

“**stormwater**” means water resulting from natural precipitation and/or the accumulation thereof and includes groundwater and spring water ordinarily conveyed by the stormwater system, as well as sea water within estuaries, but excludes water in a drinking water or wastewater reticulation system;

“**waste grinder**” means any mechanically operated device which grinds and flushes matter into the wastewater system or removes from vegetables or other foodstuffs, peels, skins, scales or other matter for discharge directly or indirectly into the wastewater system, and includes effluent from a food waste grinder;

“**wastewater**” means any liquid waste, whether or not containing matter in solution or suspension, and includes domestic liquid waste and industrial effluent but excludes stormwater,

“**wastewater system**” means the structures, sewers, pipes, valves, pumps, meters or other appurtenances under the control of the council, which may be used for the conveyance or disposal of wastewater.

## CHAPTER 1

### DUTIES AND PROHIBITED ACTS

#### 2. Duties of owners of property

- (1) Every owner of property shall on receipt of written notice by the Council—
  - (a) construct a private sewer installation on the premises;
  - (b) connect a private sewer installation to the municipal sewer, whether directly or indirectly as required by the council;
  - (c) enlarge the capacity of a private sewer installation to accommodate a greater discharge, or
  - (d) reconstruct a private sewer installation to comply with the requirements of the council;
  - (e) submit and implement a waste management plan including inter alia a waste minimisation schedule;
  - (f) submit and implement a chemical management plan including inter alia an inventory.
- (2) No owner of property may allow:—
  - (a) the ingress of groundwater or stormwater into a private sewer installation on his or her premises, or
  - (b) the seepage of wastewater from a private sewer installation on his or her premises, or
  - (c) the ingress of stormwater into a private sewer installation on his or her premises, except with the written consent of the Council and subject to such conditions as it may impose.
- (3) Every owner of property shall take adequate measures to prevent ingress and seepage referred to in subsection (2).

#### 3. Protection of municipal sewers

- (1) No person shall, except with the written consent of the council and subject to such conditions as it may impose—
  - (a) construct, erect or lay any building, structure or other thing over or in such a position or in such a manner as to interfere with or endanger any municipal sewer;
  - (b) excavate, open up or remove the ground above, next to, under or near any municipal sewer;
  - (c) damage, endanger or destroy or do any act likely to damage, endanger or destroy any municipal sewer;
  - (d) make any opening in any municipal sewer, or abstract, divert or cause to be abstracted or diverted any sewage therefrom;

- (e) discharge, permit to enter or put into any municipal sewer:—
  - (i) any stormwater;
  - (ii) any gas or steam;
  - (iii) any liquid (not being domestic wastewater) with a temperature higher than 40°C;
  - (iv) any petrol, oil, greases, waxes, fat or pesticides, insecticides or paints;
  - (v) any refuse or waste resulting from any industrial, trade, manufacturing or chemical process;
  - (vi) any liquid which has a pH value of less than five comma five or greater than twelve;
  - (vii) any substance which gives off or is liable to give off explosive, poisonous or inflammable gases or vapours;
  - (viii) any substance which has an Abel's open cup flashpoint of less than 60°C;
  - (ix) any substance which contains volatile flammable solvents or solvents immiscible with water;
  - (x) any substance which may, in the opinion of the council, by itself or in combination with any other substances:—
    - (aa) cause a nuisance to any person;
    - (bb) endanger the health of or injure any person;
    - (cc) interfere with the free flow of sewage;
    - (dd) injuriously affect any sewer or wastewater works or land connected with any sewer or with the conveyance, treatment, purification, disposal or re-use of wastewater, or
    - (ee) in any way prejudice the disposal or re-use of wastewater effluent after treatment or purification or lead to an effluent which does not meet the requirements imposed in terms of any applicable legislation;
- (f) discharge any substance other than industrial effluent into a separate private system of conveyance, and
- (g) in cases where a separate private system of conveyance for industrial effluent is installed, discharge industrial effluent into any other sewer.
- (2) The council may order that the person or persons responsible—
  - (a) demolish, alter or otherwise deal with any building, structure or other thing constructed, erected or laid in contravention of this section;
  - (b) fill in and make good any ground excavated or removed in contravention of this section;
  - (c) repair and make good any damage done in contravention of this section or resulting from a contravention of this section;
  - (d) remove anything discharged, permitted to enter or put into a sewer or public drain in contravention of this section, and
  - (e) remove anything damaging, obstructing or endangering or likely to damage, obstruct, endanger or destroy any municipal sewer.
- (3) If a person fails to comply with an order issued in terms of subsection (2), the Council may take such steps as it may deem necessary to rectify the matter at the cost of the person responsible.
- (4) The council shall, at the cost of the owner, disconnect from the municipal sewer system any private sewer installation which, in the opinion of the council, in any way endangers or injuriously affects or may endanger or injuriously affect any sewer or wastewater works or any works or land connected with any sewer or the conveyance, treatment, purification, disposal or re-use of wastewater, and require from such owner to—
  - (a) make such arrangements as may be necessary for the safe disposal of wastewater on the premises of the owner, or the conveyance thereof to a treatment installation or other suitable place approved by the council, and
  - (b) clean, repair, reconstruct, replace, reposition or otherwise comply to such requirements as the council may impose.

#### **4. Clearing of blocked private sewers**

- (1) The council shall arrange for the clearing of blocked private sewer installations at the cost of the owner.
- (2) Where it is established that a private sewer installation became blocked as a result of a defect or a blockage in the municipal sewer, no costs will be recovered from the owner.

### **CHAPTER 2**

#### **INDUSTRIAL EFFLUENT**

#### **5. Consent required to discharge of industrial effluent**

No person may, except with the written consent of the Council, and subject to such conditions it may impose:—

- (a) discharge or permit the discharge of industrial effluent directly or indirectly into any wastewater system;
- (b) increase, or permit to be increased, the quantity or vary, or permit to be varied, the nature, content or composition of any industrial effluent in contravention of the conditions imposed by the council, or
- (c) contravene, or permit to be contravened, any other condition imposed by the council when consent was granted to discharge industrial effluent.

#### 6. Non-waterborne disposal of industrial effluent

- (1) Where no municipal sewer is available for the discharge of wastewater, no person may dispose of wastewater:—
  - (a) unless the council has approved the method of transportation and imposed such conditions as it may deem fit, and
  - (b) by any method of transportation unless written proof of acceptance is provided in every instance by the person in charge of a facility approved by the council where such wastewater is disposed of; such proof to be retained, and made available for inspection, by the person who generated the wastewater or its by-products for at least one year after the date of such disposal.
- (2) No person who transports wastewater by any means other than waterborne transportation may:—
  - (a) dispose of such wastewater at or in any place other than at a facility approved by the council, or
  - (b) allow such wastewater to spill, leak or seep from any container.

#### 7. Charges in respect of industrial effluent

The person who has been granted consent to discharge, or permits the discharge of industrial effluent into a municipal sewer, shall pay to the council a charge calculated in accordance with Schedules 1 and 2.

### CHAPTER 3

#### 8. Repeal of by-laws

The by-laws listed in Schedule 3, are hereby repealed.

#### 9. Offences and penalties

Any person who:—

- (a) contravenes any provision in this by-law or fails to comply with any condition imposed in terms thereof;
- (b) threatens, resists, interferes with or obstructs any councillor, officer or official of the council in the exercise or performance of his or her duties or functions in terms of this by-law, or
- (c) deliberately furnishes false or misleading information to a councillor, officer or official of the council,

shall be guilty of an offence and liable on conviction to a fine.

### SCHEDULE 1

#### 1. Charges in respect of industrial effluent

The charges referred to in Section 7 of the by-law, are calculated as set out hereunder:

- (1) The charge is, subject to the succeeding provisions of this Schedule, the amount obtained by applying the formula calculated in terms of item (2) below.
- (2)  $V_w (SVC) + VieT (COD-1000)/1500 + VieT (SF)$

Where

“**V<sub>w</sub>**” is the total volume, expressed in kilolitres, of wastewater discharged from the premises during the period concerned.

“**SVC**” is the sewerage volumetric charge in terms of the sanitation tariff.

“**Vie**” is the total volume, expressed in kilolitres, of industrial effluent discharged from the premises during the period concerned.

“**T**” is the cost, as determined by the council, of treating 1 kilolitre of wastewater.

“**COD**” is the chemical oxygen demand of the effluent in milligrams per litre. In the event of the COD being less than 1 000, the COD factor falls away.

“**SF**” is the surcharge factor of the effluent calculated according to the formula:

$$SF = (X-L)/L$$

where

“**X**” is the concentration of one or more of the parameters listed in Schedule 2.

“L” is the limit applicable to that particular parameter.

- (i) No factor calculated by this formula may have a value less than zero;
  - (ii) In the case of the pH parameter X represents the pH value and, if (X-L) results in a negative value, a positive value of the same magnitude must be substituted.
- (3) The COD of industrial effluent is the rolling arithmetic average of four samples taken at any time during a six to twelve month period.
  - (4) The SF of industrial effluent is the latest value determined.
  - (5) The SF is cumulative for all parameters which are outside the limits set in Schedule 2.
  - (6) If, for any reason, the requisite number of samples referred to in the items (3) or (4) above are not taken, or more than four samples are taken, council may determine an equitable COD and/or SF.
  - (7) The owner/occupier of any premises is entitled to receive, on request, part of any sample taken from the premises before that sample is removed by council.

## 2. Calculation of quantity of industrial effluent discharged

- (1) The council determines the total quantity of industrial effluent discharged from a premises.
- (2) If industrial effluent and other wastewater are measured together council will make such allowance as it considers fair for that other wastewater.
- (3) If the amount of industrial effluent discharged from a premises is not directly measured:
  - (a) The council will base the determination on the amount of water used at the premises, after making whatever allowance it considers fair for water used for domestic purposes or irrigation, loss to the atmosphere, or present in the products produced at the premises, and
  - (b) if industrial effluent is discharged from the premises at more than one point, the council will allocate the said amount of water to the points of discharge as accurately as possible.
- (4) If a measuring device is proved to be defective, the council will, subject to item (5) below, make due allowance for the defect in its calculation of the quantity of discharge.
- (5) The council may, by notice in writing, require the occupier, owner or person in control of, or using, any premises to provide such information, access or facilities council considers necessary either for the accurate calculation of the charge payable, or to establish whether a charge is in fact payable in respect of the premises.
- (6) If the council is of the opinion that the sampling does not represent the actual average quality of industrial effluent, then it may use an alternative acceptable method in order to determine an equitable industrial effluent charge.
- (7) If the council is unable to assess the quantity or charge due because:—
  - (a) the formula referred to in item 1(2) above, is dispensed with, and/or
  - (b) a notice referred to in item 2(5) above is not complied with and/or
  - (c) any contravention of this by-law has taken place and as a result the charges due in respect of the premises concerned cannot be calculated accurately,

then the council will assess the charge due as being such amount as it considers fair.

- (8) Notwithstanding item (7) above, the council may, in order to assess any charge provided for in this by-law or to ensure compliance with any provision of this by-law, by notice in writing, require the owner of any premises, within a specified period and at the expense of the owner to provide and maintain such gauges or other measuring devices as the council considers necessary to:—
  - (a) measure the volume of water used at the premises and the volume of water obtained from any source other than council;
  - (b) measure separately the volume of water used for any specified purpose or in any specified portion of the premises, and
  - (c) provide proof to the satisfaction of the council that any gauge or device referred to in items 8(a) and 8(b) is functioning correctly and accurately.

## SCHEDULE 2

### Prohibited Discharge into sewers

<i>Section A: General</i>		Not less than	Not to exceed
1.	Temperature at point of entry	0 °C	40 °C
2.	Electrical Conductivity at 25 °C		500 mS/m
3.	pH Value at 25 °C	5.5	12.0
4.	Chemical Oxygen Demand		5 000 mg/ℓ

<i>Section B: Chemical substances other than Heavy Metals — maximum concentrations</i>		
1.	Settleable Solids (60 minutes)	50 ml/ℓ
2.	Suspended Solids	1 000 mg/ℓ
3.	Total dissolved solids at 105 °C	4 000 mg/ℓ
4.	Chloride as Cl	1 500 mg/ℓ
5.	Total sulphates as SO <sub>4</sub>	1 500 mg/ℓ
6.	Total phosphates as P	25 mg/ℓ
7.	Total cyanides as CN	20 mg/ℓ
8.	Total sulphides as S	50 mg/ℓ
9.	Total phenols as C <sub>6</sub> H <sub>5</sub> OH	50 mg/ℓ
10.	Total sugars and starches as glucose	1 500 mg/ℓ
11.	Oils, greases, waxes and fat	400 mg/ℓ
12.	Sodium as Na	1 000 mg/ℓ

<i>Section C: Metals and inorganic content — maximum concentrations</i>		
<b>Group 1</b>		
1.	Iron as Fe	50 mg/ℓ
2.	Chromium as Cr	10 mg/ℓ
3.	Copper as Cu	20 mg/ℓ
4.	Zinc as Zn	30 mg/ℓ
<b>Total collective concentration of all metals in Group 1 shall not exceed 50 mg/ℓ</b>		
<i>Section C: Metals and inorganic content — maximum concentrations</i>		
<b>Group 2</b>		
5.	Arsenic as As	5 mg/ℓ
6.	Boron as B	5 mg/ℓ
7.	Lead as Pb	5 mg/ℓ
8.	Selenium as Se	5 mg/ℓ
9.	Mercury as Hg	5 mg/ℓ
10.	Titanium as Ti	5 mg/ℓ
11.	Cadmium as Cd	5 mg/ℓ
12.	Nickel as Ni	5 mg/ℓ
<b>Total collective concentration of all metals and inorganic constituents in Group 2 shall not exceed 20 mg/ℓ</b>		

**Section D: Prohibited radioactive materials**

Any radioactive wastes or isotopes of such nature or in such concentration as do not meet the requirements laid down by the Council for Nuclear Safety referred to in Section 24 of the Nuclear Energy Act (Act 92 of 1982) as amended.

**SCHEDULE 3****Cape Metropolitan Council:**

Provincial Gazette no 5582 dated 15/9/2000: By-law relating to wastewater and industrial effluent

**Cape Town Municipality:**

P.N.397/1987: Drainage and sewerage by-law, as amended

**Durbanville Municipality:**

P.N. 393/1995: Additional sewerage by-law

**Fish Hoek Municipality:**

P.N. 867/1979: Drainage and sewerage by-law, as amended

**Goodwood Municipality:**

P.N. 706/1991: Sewerage by-law P.N. 1048/1971: By-law relating to industrial effluent, as amended

**Gordon's Bay Municipality:**

P.N. 570/1963: By-law relating to industrial effluent

**Kraaifontein Municipality:**

P.N. 253/1990: By-law relating to industrial effluent

**Milnerton Municipality:**

P.N. 814/1971: Additional sewerage by-law, as amended

**Pinelands Municipality:**

P.N. 486/1939: Sewerage by-law, as amended

**Simon's Town Municipality:**

P.N. 771/1985: By-law relating to industrial effluent

**Somers West Municipality:**

P.N. 946/1978: Drainage and sewerage by-law, as amended P.N. 654/1983: By-law relating to industrial effluent



**Strand Municipality:**

P.N. 533/1983: By-law relating to industrial effluent

**West Coast Peninsula Municipality:**

P.N. 501/1996: Sewerage by-law

**Brackenfell Village Management Board:**

P.N. 575/1950, OG 2497, 29 September 1950: Standard Drainage Regulations

**Brackenfell Village Management Board:**

P.N. 75, OG 3494, 24 January 1969: Regulations relating to conservancy tanks

**Brackenfell Municipality:**

P.N. 522/1971, OG 3618, 28 May 1971: Additional Drainage regulations

**Western Cape Regional Services Council:**

P.N. 776/1993: Industrial effluent by-law

1 September 2006

18367

**STAD KAAPSTAD****VERORDENING OP AFVALWATER EN NYWERHEIDSUITVLOEISEL****INHOUD**

<b>1. DEFINISIES</b>	Bladsy 2
<b>HOOFSTUK 1. — PLIGTE EN VERBODE HANDELINGE</b>	Bladsy 3
2. Pligte van eienaars van eiendom	Bladsy 3
3. Beskerming van munisipale riole	Bladsy 3
4. Skoonmaak van verstopte privaat riole	Bladsy 5
<b>HOOFSTUK 2. — NYWERHEIDSUITVLOEISEL</b>	Bladsy 6
5. Toestemming nodig vir die afvoer van nywerheidsuitvloei	Bladsy 6
6. Nie-spoelwegdoening met nywerheidsuitvloei	Bladsy 6
7. Heffings ten opsigte van nywerheidsuitvloei	Bladsy 6
<b>HOOFSTUK 3. — HERROEPING EN BOETES</b>	Bladsy 7
8. Herroeping van verordeninge	Bladsy 7
9. Oortredings en boetes	Bladsy 7
<b>SKEDULE 1 — HEFFINGS EN HOEVEELHEID NYWERHEIDSUITVLOEISEL</b>	Bladsy 7
1. Heffings ten opsigte van nywerheidsuitvloei	Bladsy 7
2. Berekening van hoeveelheid nywerheidsuitvloei wat afgevoer word	Bladsy 8
<b>SKEDULE 2 — VERBODE AFVOER IN RIOLE</b>	Bladsy 10
<b>SKEDULE 3 — HERROEPING VAN VERORDENINGE</b>	Bladsy 11

**VERORDENING OP AFVALWATER EN NYWERHEIDSUITVLOEISEL****1. Definiesies**

In dié verordening beteken—

“**Raad**” die Raad van die munisipaliteit van Kaapstad, met inbegrip van enige struktuur, Raadslid of amptenaar van die Raad wat bevoegdhede uitoefen of pligte of funksies ingevolge dié verordening uitvoer, wat deur die Raad aan sodanige struktuur, Raadslid of amptenaar gedelegeer is;

“**nywerheidsuitvloei**” enige vloeistof, hetsy dit enige opgeloste of swewende stowwe bevat, al dan nie, wat vrygelaat word in die loop van of as gevolg van enige nywerheidsbedryf, vervaardiging, mynbou of chemiese proses of enige laboratorium-, navorsings-, diens- of landbouwerkzaamheid, en dit sluit stof in wat deur ’n afvalmeul vrygelaat word;

“**munisipale riool**” enige pyp of leipyp onder Raadsbeheer wat vir die vervoer van afvalwater gebruik kan word;

**“okkupeerder”** ’n persoon wat ’n perseel of deel daarvan bewoon, ongeag die titel waaronder hy of sy dit okkupeer;

**“eienaar”** —

- (a) die persoon in wie die eiendomsreg ten opsigte van ’n perseel van tyd tot tyd setel;
- (b) in ’n geval waar die persoon, in wie die eiendomsreg van ’n perseel setel, insolvent of oorlede is, of wat vir welke rede ookal regsonbevoegd is, die persoon by wie die bevoegdheid as kurator, trustee, eksekuteur, administreerder, geregtelike bestuurder, likwidateur of ander regsverteenvoorder vir die administrasie en bestuur van die perseel berus;
- (c) in enige geval waar die munisipaliteit nie die identiteit van so ’n persoon kan vasstel nie, ’n persoon wie geregtig is op die voordeel van die gebruik van sodanige perseel of gebou of geboue daarop;
- (d) in die geval van ’n perseel ten opsigte waarvan ’n huurooreenkoms vir ’n tydperk van 30 jaar of langer aangegaan is, die huurder daarvan;
- (e) die persoon wie onroerende eiendom van die munisipaliteit gekoop het ingevolge ’n skema waar die koopprys in paaiemente betaal word, maar oordrag van eiendomsreg nog nie plaasgevind het nie;
- (f) ten opsigte van—
  - (i) ’n stuk grond afgebaken op ’n deelplan wat ingevolge die Wet op Deeltitels, Nr 95 van 1986, geregistreer is, die ontwikkelaar of die regspersoon ten opsigte van die gemeenskaplike eiendom, of
  - (ii) ’n gedeelte soos omskryf in die gemelde Wet, die persoon in wie se naam sodanige gedeelte ingevolge ’n deeltitelakte geregistreer is, en omvat dit die regmatig aangestelde verteenwoordiger van sodanige persoon;

**“persoon”** ook ’n regspersoon;

**“stormwater”** die water wat deur natuurlike neerslag of akkumulاسie veroorsaak word, met inbegrip van reënwater, grondwater of fonteinwater;

**“afvalmeul”** enige meganiese toestel wat stowwe maal en dit in die afvalwaterstelsel wegspoel, of wat skille, skubbe of ander stowwe van groente of ander voedingsmiddele verwyder en dit regstreeks of onregstreeks in die afvalwaterstelsel uitlaat, met inbegrip van uitvloeisel van ’n voedselafvalmeul;

**“afvalwater”** enige vloeibare afval, hetsy dit opgeloste of swewende stowwe bevat, al dan nie, met inbegrip van huishoudelike vloeibare afval en nywerheidsuitvloeisel, maar met uitsluiting van stormwater;

**“afvalwaterstelsel”** die strukture, riole, pype, kleppe, pompe, meters of ander toebehore onder Raadsbeheer wat vir die vervoer of wegdoening van afvalwater gebruik kan word.

## HOOFSTUK 1

### PLIGTE EN VERBODE HANDELINGE

#### 2. Pligte van eienaars van eiendom

- (1) Elke eienaar van eiendom moet by ontvangs van skriftelike kennisgewing deur die Raad—
  - (a) ’n privaatrioolinstallasie op die perseel bou;
  - (b) ’n privaatrioolinstallasie met die munisipale riool verbind, hetsy regstreeks of onregstreeks, na gelang die Raad vereis;
  - (c) die vermoë van ’n privaatrioolinstallasie vergroot om aan ’n groter afvoer te voldoen; of
  - (d) ’n privaatrioolinstallasie herbou om aan Raadsvereistes te voldoen; of
  - (e) ’n afvalbestuursplan, met inbegrip van onder andere ’n minimaliseringskediule, voorlê en implementeer; of
  - (f) ’n chemikaliebestuursplan, met inbegrip van onder andere ’n inventaris, voorlê en implementeer.
- (2) Geen eienaar van eiendom mag toelaat—
  - (a) dat grondwater of stormwater in ’n privaatrioolinstallasie op sy/haar eiendom invloei nie;
  - (b) dat afvalwater van ’n privaatrioolinstallasie op sy/haar eiendom deursypel nie;
  - (c) dat grondwater of stormwater in ’n privaatrioolinstallasie op sy/haar eiendom invloei nie behalwe met toestemming van die Raad en onderhewig aan voorwaardes wat die Raad kan oplê.
- (3) Elke eienaar van eiendom moet toereikende stappe doen om die invloei en deursypeling, waarna in subartikel (2) verwys word, te voorkom.

#### 3. Beskerming van munisipale riole

- (1) Geen persoon mag sonder Raadstoestemming, en onderhewig aan voorwaardes wat die Raad kan oplê,
  - (a) enige gebou, struktuur of ander ding oor of in ’n posisie of op ’n manier bou, oprig of lê wat enige munisipale riool sal belemmer of in gevaar sal stel nie;
  - (b) die grond bo-oor, langs of onder enige munisipale riool uitgrawe, oopmaak of verwyder nie;

- (c) enige munisipale riool beskadig, in gevaar stel of vernietig, of enige handeling uitvoer wat dit waarskynlik sal beskadig, in gevaar sal stel of sal vernietig nie;
  - (d) enige opening in enige munisipale riool maak, of enige rioolwater daaruit onttrek of afkeer, of laat onttrek of afkeer nie;
  - (e) die onderstaande in enige munisipale riool afvoer, toelaat om dit binne te gaan of dit daarin plaas nie —
    - (i) enige stormwater;
    - (ii) enige gas of stoom;
    - (iii) enige vloeistof (wat nie huishoudelike afvalwater is nie) met 'n temperatuur hoër as 40°C;
    - (iv) enige petrol, olie, ghries, was, vet of plaagdoders, insekdoders of verf;
    - (v) enige vullis of afval wat deur enige nywerheids-, bedryfs- vervaardigings- of chemiese proses veroorsaak word;
    - (vi) enige vloeistof wat 'n pH-waarde van minder as vyf komma vyf of hoër as twaalf het;
    - (vii) enige stof wat plofbare, giftige of brandbare gasse of dampe afgee of waarskynlik kan afgee;
    - (viii) enige stof waarvan die Abel-oopbekerontvlampunt minder as 60° is;
    - (ix) enige stof wat vlugtige vlambare oplosmiddels bevat of oplosmiddels wat onmengbaar met water is;
    - (x) enige stof wat dalk, na die Raad se mening, op sy eie of in kombinasie met enige ander stowwe
      - (aa) enige persoon tot las kan wees;
      - (bb) enige persoon kan beseer of sy/haar gesondheid in gevaar kan stel;
      - (cc) die vry vloeiing van rioolwater kan belemmer;
      - (dd) 'n nadelige uitwerking kan hê op enige riool of afvalwateraanleg, of enige grond wat met die vervoer, behandeling, suiwering, wegdoening of hergebruik van afvalwater verband hou; of
      - (ee) die wegdoening met of hergebruik van afvalwateruitvloeisel na behandeling of suiwering benadeel, of wat 'n uitvloeisel tot gevolg het wat nie aan die vereistes voldoen wat ingevolge enige toepaslike wetgewing opgelê is nie;
  - (f) enige ander stof as nywerheidsuitvloeisel in 'n afsonderlike privaat afvoerstelsel afvoer nie; en
  - (g) in gevalle waar 'n afsonderlike privaat afvoerstelsel vir nywerheidsuitvloeisel geïnstalleer is, nywerheidsuitvloeisel in enige ander riool afvoer nie.
- (2) Die Raad kan gelas dat enige verantwoordelike persoon of persone,
- (a) enige gebou, struktuur of ander ding sloop, verander of andersins daarmee handel, wat in stryd met dié artikel gebou, opgerig of gelê is;
  - (b) enige grond opvul of herstel wat in stryd met dié artikel uitgegrawe of verwyder is;
  - (c) enige skade goedmaak wat in stryd met dié artikel aangerig word of wat as gevolg van 'n oortreding van dié artikel veroorsaak word;
  - (d) enigiets verwyder wat in stryd met dié artikel in 'n riool of openbare dreineergerief afgevoer word, toegelaat word om daarin te gaan of daarin geplaas word; en
  - (e) enigiets verwyder wat enige munisipale riool kan beskadig, verstop of in gevaar kan stel, of wat dit waarskynlik kan beskadig, verstop of in gevaar kan stel;
- (3) As 'n persoon versuim om gehoor te gee aan 'n bevel wat ingevolge subartikel (2) uitgereik is, kan die Raad stappe doen na gelang hy nodig ag om die aangeleentheid op koste van die verantwoordelike persoon reg te stel.
- (4) Die Raad sal op koste van die eienaar enige privaat rioolinstallasie van die munisipale rioolstelsel afsluit as dit, na die mening van die Raad, enige nadelige uitwerking kan hê op, of enige gevaar kan inhou vir, of dalk enige nadelige uitwerking kan hê op, of enige gevaar kan inhou vir enige riool of afvalwateraanleg of enige aanleg of grond wat met enige riool of die vervoer, behandeling, suiwering, wegdoening met of hergebruik van afvalwater verband hou, en sal vereis dat sodanige eienaar
- (a) reëlins tref wat nodig kan wees vir die veilige wegdoening met afvalwater op die perseel van die eienaar, of vir die vervoer daarvan na 'n behandelingsaanleg of ander geskikte plek wat deur die Raad goedgekeur is; en
  - (b) die privaat rioolinstallasie skoonmaak, herstel, herbou, vervang of verlê, of andersins voldoen aan die vereistes wat die Raad dit kan oplê.

#### 4. Skoonmaak van verstopte privaat riele

- (1) Die Raad sal reël dat verstopte privaat rioolinstallasies op koste van die eienaar skoongemaak word.
- (2) Waar daar vasgestel word dat 'n privaat rioolinstallasie as gevolg van 'n defek of verstopping van die munisipale riool verstop geraak het, sal geen koste van die eienaar verhaal word nie.

**HOOFSTUK 2****NYWERHEIDSUITVLOEISEL****5. Toestemming nodig vir die afvoer van nywerheidsuitvloei**

Geen persoon mag sonder skriftelike Raadstoestemming, en onderhewig aan voorwaardes wat die Raad kan opla,

- (a) nywerheidsuitvloei regstreeks of onregstreeks in enige afvalwaterstelsel afvoer of toelaat dat dit daarin afgevoer word nie;
- (b) strydig met die voorwaardes wat die Raad opla, het, die aard, inhoud of samestelling van enige nywerheidsuitvloei verhoog of wysig, of toelaat dat dit verhoog of gewysig word nie; of
- (c) enige ander voorwaarde wat die Raad opla, het, oortree of toelaat dat dit oortree word, nadat toestemming daartoe verleen is om nywerheidsuitvloei af te voer nie.

**6. Nie-spoelwegdoening met nywerheidsuitvloei**

(1) Waar daar geen munisipale riool vir die afvoer van afvalwater beskikbaar is nie, mag geen persoon met afvalwater wegdoen

- (a) tensy die Raad die vervoermethode goedgekeur het en sodanige voorwaardes opla, het na gelang hy goedgekeur het; en
- (b) volgens enige vervoermethode nie, tensy skriftelike bewys van aanvaarding in elke geval gelewer word deur die persoon aan die hoof van 'n gerief wat deur die Raad goedgekeur is, en waar daar met sodanige afvalwater of die nuweprodukte daarvan weggedoen word; sodanige bewys moet vir minstens een jaar na die datum van sodanige wegdoening gehou word en vir inspeksie beskikbaar gestel word deur die persoon wat die afvalwater of die nuweprodukte daarvan gegenereer het.

(2) Geen persoon wat afvalwater op 'n ander wyse as spoelafvoer vervoer, mag

- (a) met sodanige afvalwater wegdoen op of in enige ander plek as 'n gerief wat deur die Raad goedgekeur is nie; of
- (b) toelaat dat sodanige afvalwater uit enige houer stort, lek of syfer nie.

**7. Heffings ten opsigte van nywerheidsuitvloei**

Die persoon aan wie toestemming verleen is om nywerheidsuitvloei in 'n munisipale riool af te voer, of om toe te laat dat dit daarin afgevoer word, moet aan die Raad 'n heffing betaal wat in ooreenstemming met Skedules 1 en 2 bereken word.

**HOOFSTUK 3****8. Herroeping van verordeninge**

Die verordeninge wat in Skedule 3 aangegee word, word hiermee herroep.

**9. Oortreding en boetes**

Enige persoon—

- (a) wat enige bepaling in dié verordening oortree of versuim om aan enige voorwaarde te voldoen wat ingevolge dié verordening opla, word,
- (b) wat enige Raadslid, beampte of amptenaar van die Raad dreig, hinder, kortwiek of keer by die uitoefening of uitvoering van sy/haar pligte of funksies ingevolge dié verordening, of
- (c) wat opsetlik onjuiste of misleidende inligting aan 'n Raadslid, beampte of amptenaar van die Raad verskaf,

sal aan 'n oortreding skuldig wees, en hom/haar by skuldigbevinding aan 'n boete blootstel.

**SKEDULE 1****1. Heffings ten opsigte van nywerheidsuitvloei**

Die heffings waarna in artikel 7 van die verordening verwys word, word bereken soos daar hieronder uiteengesit word.

- (1) Die heffing is, onderhewig aan die verdere bepalings van dié skedule, die bedrag wat verkry word deur die formule ooreenkomstig item (2) hieronder te bereken.
- (2) **Vw (SVC) + VieT (COD-1000/1500) + VieT (S.F.)**

Waar—

“**Vw**” die totale volume, uitgedruk in kiloliter, afvalwater is wat gedurende die betrokke tydperk van die perseel afgevoer word.

“**SVC**” die volumetriese rioolheffing ooreenkomstig die sanitasietarief is.

“**Vie**” die totale volume, uitgedruk in kiloliter, nywerheidsuitvloei is wat gedurende die betrokke tydperk van die perseel afgevoer word.

“**T**” die koste, na gelang die Raad bepaal, daarvan is om 1 kiloliter afvalwater te behandel.

“**COD**” die chemiese suurstofvraag van die uitvloei in milligram per liter is. Ingeval die COD minder as 1 000, is, vervaal die COD-faktor.

“SF” die toeslagfaktor van die uitvloeisel is wat bereken word volgens die formule —

$$SF = (X-L)/L$$

Waar

“X” die konsentrasie van een of meer van die parameters is wat in skedule 2 aangegee word.

“L” die perk is wat op die bepaalde parameter van toepassing is.

- (i) Geen faktor wat deur middel van dié formule bereken word, mag ’n waarde laer as nul hê nie.
- (ii) In die geval van die pH-parameter verteenwoordig X die pH-waarde, en as (X-L) ’n negatiewe waarde tot gevolg het, moet dit deur ’n positiewe waarde van dieselfde grootte vervang word.
- (3) Die COD van nywerheidsuitvloeisel is die rol- rekenkundige gemiddelde van vier monsters wat te eniger tyd gedurende ’n ses- tot twaalfmaandetydperk geneem is.
- (4) Die SF van nywerheidsuitvloeisel is die jongste waarde wat bepaal is.
- (5) Die SF is kumulatief vir alle parameters buite die perke wat in skedule 2 bepaal is.
- (6) As die vereiste getal monsters waarna in items (3) en (4) hierbo verwys word, om welke rede ook al nie geneem word nie, of as meer as vier monsters geneem word, kan die Raad ’n billike COD en/of SF bepaal.
- (7) Die eienaar/okkupant van enige perseel is daarop geregtig om op versoek ’n deel van enige monster te ontvang wat op die perseel geneem is, voordat die Raad dié monster verwyder.

## 2. Berekening van hoeveelheid nywerheidsuitvloeisel wat afgevoer word

- (1) Die Raad bepaal die totale hoeveelheid nywerheidsuitvloeisel wat van ’n perseel afgevoer word.
- (2) As nywerheidsuitvloeisel en ander afvalwater saam gemeet word, sal die Raad vir die ander afvalwater voorsiening maak na gelang hy billik ag.
- (3) As die hoeveelheid nywerheidsuitvloeisel wat van ’n perseel afgevoer word, nie regstreeks gemeet word nie,
  - (a) sal die Raad die bepaling grond op die hoeveelheid water wat op die perseel gebruik word, nadat hy billike voorsiening gemaak het vir water wat vir huishoudelike doeleindes of besproeiing gebruik word, water wat aan die atmosfeer afgestaan word, of water wat teenwoordig is in artikels wat op die perseel geproduseer word;
  - (b) en as die nywerheidsuitvloeisel by meer as een punt van die perseel afgevoer word, sal die Raad die hoeveelheid water so akkuraat moontlik aan die afvoerpunte toewys.
- (4) As ’n meettoestel defek blyk te wees, sal die Raad, onderhewig aan item (5) hieronder, behoorlik vir die defek voorsiening maak by sy berekening van die afvoerhoeveelheid.
- (5) Die Raad kan deur middel van skriftelike kennisgewing aan die okkupant of eienaar van enige perseel, of aan die persoon in beheer daarvan of wat dit gebruik, vereis om sodanige inligting, toegang of geriewe te verskaf wat die Raad nodig ag òf vir die akkurate berekening van die heffing wat betaalbaar is, òf om te bepaal of ’n heffing wel ten opsigte van die perseel betaalbaar is.
- (6) As die Raad van mening is dat die monsters nie die werklike gemiddelde gehalte van die nywerheidsuitvloeisel verteenwoordig nie, kan hy ’n aanvaarbare alternatiewe metode gebruik om ’n billike nywerheidsuitvloeiheffing te bepaal.
- (7) As die Raad nie die hoeveelheid of verskuldigde heffing kan bepaal nie, omdat
  - (a) daar weggedoen word met die formule waarna in item 1(2) hierbo verwys word, en/of
  - (b) daar nie gehoor gegee word aan ’n kennisgewing waarna in item 2(5) hierbo verwys word nie, en/of
  - (c) dié verordening op enige manier oortree is, en die verskuldigde heffings ten opsigte van die betrokke perseel gevolglik nie akkuraat bereken kan word nie,

sal die Raad die verskuldigde heffing bepaal na gelang hy billik ag.

- (8) Nieteenstaande item (7) hierbo, kan die Raad, ten einde enige heffing te bepaal waarvoor daar in dié verordening voorsiening gemaak word, of om voldoening aan enige bepaling van dié verordening te verseker, deur middel van skriftelike kennisgewing vereis dat die eienaar van enige perseel binne ’n bepaalde tyd, en op die eienaar se koste, sodanige meters en meettoestelle verskaf en in stand hou na gelang die Raad nodig ag —
  - (a) om die volume water te meet wat op die perseel gebruik word, asook die volume water wat van enige ander bron as die Raad verkry word;
  - (b) om die volume water wat vir enige gespesifiseerde doel of op enige gespesifiseerde gedeelte van die perseel gebruik word, afsonderlik te meet; en
  - (c) om tot bevrediging van die Raad bewys te lewer dat enige meter of toestel waarna in items 8(a) en 8(b) verwys word, korrek en akkuraat werk.

**SKEDULE 2****Verbode afvoer in rioler**

<i>Afdeling A: Algemeen</i>		Nie minder nie as	Moenie onderstaande oorskry nie
1.	Temperatuur by ingangspunt	0 °C	40 °C
2.	Elektriese geleivermoë		500 mS/m
3.	PH-waarde by 25 °C	5.5	12.0
4.	COD (chemiese suurstofvraag)		5 000 mg/ℓ

*Afdeling B: Ander chemiese stowwe as swaarmetale — maksimumkonsentrasies*

1.	Besinkbare vaste stowwe (60 minute)	50 ml/ℓ
2.	Swewende vaste stowwe	1 000 mg/ℓ
3.	Totaal opgelos by 105 °C	4 000 mg/ℓ
4.	Chloried as Cl	1 500 mg/ℓ
5.	Totale sulfate as SO <sub>4</sub>	1 500 mg/ℓ
6.	Totale fosfate as P	25 mg/ℓ
7.	Totale sianiede as CN	20 mg/ℓ
8.	Totale sulfiede as S	50 mg/ℓ
9.	Total fenole as C <sub>6</sub> H <sub>5</sub> OH	50 mg/ℓ
10.	Totale suikers en stysels as glukose	1 500 mg/ℓ
11.	Olies, ghries, was en vet	400 mg/ℓ
12.	Natrium as Na	1 000 mg/ℓ

*Afdeling C: Metale en anorganiese inhoud — maksimumkonsentrasies***Groep 1**

1.	Yster as Fe	50 mg/ℓ
2.	Chroom as Cr	10 mg/ℓ
3.	Koper as Cu	20 mg/ℓ
4.	Sink as Zn	30 mg/ℓ

*Totale gesamentlike konsentrasie van alle metale in Groep 1 mag nie 50 mg/ℓ oorskry nie*

*SAfdeling C: Metale en anorganiese inhoud—maksimumkonsentrasies***Groep 2**

5.	Arseen as As	5 mg/ℓ
6.	Boor as B	5 mg/ℓ
7.	Lood as Pb	5 mg/ℓ
8.	Seleen as Se	5 mg/ℓ
9.	Kwik as Hg	5 mg/ℓ
10.	Titaan as Ti	5 mg/ℓ
11.	Kadmium as Cd	5 mg/ℓ
12.	Nikkel as Ni	5 mg/ℓ

*Totale gesamentlike konsentrasie van alle metale en anorganiese bestanddele in Groep 2 mag nie 20 mg/ℓ oorskry nie*

**Afdeling D: Verbode radioaktiewe stowwe**

Enige radioaktiewe afval of isotope waarvan die aard of konsentrasie sodanig is dat dit nie voldoen aan die vereistes wat deur die Raad vir Kernveiligheid neergelê is nie, en waarna in artikel 24 van die Wet op Kernenergie (Wet 92 van 1982), soos gewysig, verwys word.

**SKEDULE 3****Kaapse Metropolitaanse Raad:**

Provinsiale Koerant, no. 5768 van 21/9/2001: Verordening op afvalwater en nywerheidsuitvloei

**Kaapstadse Munisipaliteit:**

P.K.397/1987: Verordening op dreinerings- en riolerings, soos gewysig

**Durbanville-munisipaliteit:**

P.K. 393/1995: Aanvullende verordening op riolerings

**Vishoek-munisipaliteit:**

P.K. 867/1979: Verordening op dreinerings- en riolerings, soos gewysig

**Goodwood-munisipaliteit:**

P.K. 706/1991: Verordening op riolerings P.K. 1048/1971: Verordening op nywerheidsuitvloei, soos gewysig

**Gordonsbaai-munisipaliteit:**

P.K. 570/1963: Verordening op nywerheidsuitvloei

**Kraaifonteinse Munisipaliteit:**

P.K. 253/1990: Verordening op nywerheidsuitvloeisel

**Milnerton-munisipaliteit:**

P.K. 814/1971: Aanvullende verordening op riolering, soos gewysig

**Pinelands-munisipaliteit:**

P.K. 486/1939: Verordening op riolering, soos gewysig

**Simonstadse Munisipaliteit:**

P.K. 771/1985: Verordening op nywerheidsuitvloeisel

**Somerset-Wes-munisipaliteit:**

P.K. 946/1978: Verordening op dreinerings en riolering, soos gewysig P.K. 654/1983: Verordening op nywerheidsuitvloeisel

**Strand-munisipaliteit:**

P.K. 533/1983: Verordening op nywerheidsuitvloeisel

**Munisipaliteit Weskus-skiereiland:**

P.K. 501/1996: Verordening op riolering

**Brackenfell Village-bestuursraad:**

P.K. 575/1950, OG 2497, 29 September 1950: Standaardrioleringregulasies

**Brackenfell Village-bestuursraad:**

P.K. 75, OG 3494, 24 Januarie 1969: Regulasies oor riooltenks

**Brackenfell-munisipaliteit:**

P.K. 522/1971, OG 3618, 28 Mei 1971: Bykomende rioleringregulasies

**Wes-Kaapse Streekdiensteraad:**

P.K. 776/1993: Verordening op Nywerheidsuitvloeisel

1 September 2006

18367

**ISIXEKO SASEKAPA****UMTHETHO KAMASIPALA OPHATHELELE KUMANZI AMDAKA NEMIJELO EHAMBISA AMANZI AMDAKA AVELA KWIMIZI-MVELISO****IZIQUATHO****1. IINKCAZELO****ISAHLUKO 1. — UXANDUVA NEMITHETHO ETHINTELWEYO**

2. Uxanduva lwabanini propati
3. Ukukhuselwa kwemijelo ephantsi komhlaba ehambisa amanzi amdaka
4. Ukucocwa kwemijelo ephantsi komhlaba evalekileyo

**ISAHLUKO 2. — AMANZI AMDAKA AVELA KWIMIZI-MVELISO**

5. Imvume eyimfuneko phambi kokuba kuchithwe amanzi amdaka avela kwimizi-mveliso
6. Ukulahlwa kwamanzi amdaka avela kwimizi-mveliso ngeenqanawa okanye ngezinye iindlela zokuthutha amanzi amdaka
7. Imirhumo ephathelele kumanzi amdaka avela kwimizi-mveliso

**ISAHLUKO 3. — UKURHOXISWA NEZOHLWAYO**

8. Ukurhoxiswa/ukubhangiswa kwemithetho kaMasipala
9. Ulwaphulo-mthetho nezohlwayo

**ISHEDYULI 1 — IMIRHUMO NONGAKANANI BAMANZI AMDAKA AVELA KWIMIZI-MVELISO**

1. Imirhumo ephathelele ekulahlweni kwamanzi amdaka avela kwimizi-mveliso
2. Ukubalwa kobungakanani benkunkuma engamanzi amdaka avela kwimizi-mveliso elahlwayo

**ISHEDYULI 2 — AMANZI AMDAKA EKUNGAVUMELEKANGA UKUBA ALAHLWE KWIMIJELO EHAMBISA PHANTSI KOMHLABA EHAMBISA AMANZI AMDAKA****ISHEDYULI 3 — UKUBHANGISWA/UKURHOXISWA KWEMITHETHO KAMASIPALA**

Iphepha 2

Iphepha 3

Iphepha 3

Iphepha 3

Iphepha 5

Iphepha 6

Iphepha 6

Iphepha 6

Iphepha 6

Iphepha 7

Iphepha 7

Iphepha 7

Iphepha 7

Iphepha 7

Iphepha 8

Iphepha 10

Iphepha 11



**UMTHETHO KAMASIPALA OPHATHELELE KUMANZI AMDAKA NEMIJELO EHAMBISA AMANZI AMDAKA  
AVELA KWIMIZI-MVELISO**

**1. IiNkazelo**

Kulo Mthetho kaMasipala —

**“ibhunga”** kubhekiselelwe kumasipala weSixeko saseKapa yaye kuqukwa nawuphi na umbutho, uceba, okanye igosa lebhunga elisebenzisa amagunya okanye elenza imisebenzi phantsi kwalo mthetho kamasipala, amagunya anikezelwe lo mbutho, uceba okanye igosa libhunga;

**“amanzi amdaka avela kwimizi-mveliso”** kubhekiselelwe kuyo nayiphi na into engamanzi nokuba iqulethe isinyibilikiso, ntole yo elahlwayo xa kusenziwa okanye ngenxa yawo nawuphi na umsebenzi wokurhweba kwimizi-mveliso, ekwenziweni kwempahla, kumsebenzi wokombiwa kwezimbiwa okanye kwemichiza okanye kumsebenzi wobunzululwazi, uphando, ukwenziwa kweenkonzo, okanye nawuphi umsebenzi wolimo, yaye kuqukwa nentsalela ekhutshwa sisixhobo esicokisa amanzi;

**“umjelo ophantsi komhlaba ohambisa amanzi amdaka kamasipala”** kubhekiselelwe kuwo nawuphi na umbhobho okanye umsele ophantsi kolawulo lwebhunga nonokusetyenziselwa ukuhambisa amanzi amdaka;

**“umhlali”** uthetha umntu ohlala kuzo naziphi na izakhiwo okanye kwisiqingatha sendawo ngoko, ngaphandle kokujonga ubunini bakhe lowo uhleliyo;

**“umnini”** uthetha —

- (a) umntu othi amaxesha amaninzi ubunini obusemthethweni bomhlaba nesakhiwo bube bobakhe;
- (b) kwimeko apho umntu onelungelo elisemthethweni lobunini besakhiwo nomhlaba engenakuhlawula matyala okanye eswelekile, okanye ephantsi kwayo nayiphi na imeko yokukhubazeka ngokusemthethweni, umntu lowo ulawulo lwezo zakhiwo nemihlaba luphantsi kwelungelo lakhe ngokusemthethweni njengomgcini, umphathiswa, umsayini, umlawuli, umlawuli ongumgwebi, umsebenzisi-nkonzosi wempahla ukuze kuhlawulwe ityala okanye omnye ummeli womthetho;
- (c) nakuyiphi imeko apho ibhunga lingakwaziyo ukufumanisa ukuba ngubani lowo mntu, umntu ofanelekileyo kuxhamlo lokusebenzisa ezo zakhiwo okanye isakhiwo okanye izakhiwo ngoko;
- (d) kwimeko apho ngaphakathi kwizakhiwo kungenwe kwisivumelwano sokuqeshisa seminyaka engama-30 nangaphaya, umqeshi /oqeshileyo ngoko;
- (e) umntu othenge isakhiwo nomhlaba ongasukiyo kumasipala, ngokuphantsi kwenkqubo evumela ukuba ixabiso ekuthengwe ngalo lihlawulwe ngezavenge nongakhange afumane utshintsho kumasipala;
- (f) ngokubhekiselele kwi—
  - (i) isiqingatha somhlaba esicaciswe kwisicwangciso somhlathi obhalisiweyo ngokuphantsi koMthetho woMhlathi weeTayitile, 1986 (uMthetho 95 ka 1986), umphuhlisi okanye iqumrhu ngokubhekiselele kumhlaba nesakhiwo salo lonke, okanye
  - (ii) icandelo njengoko licacisiwe kuMthetho ololo hlobo, umntu ogama lakhe libhaliswe phantsi kwesahluko sobunini bomhlaba ngokusemthethweni; kuquka ne-arhente enyulwe ngokusemthethweni yomntu onjalo;

**“umntu”** uquka umntu ngokwasemthethweni;

**“amanzi esitshi”** kubhekiselelwe kumanzi abangelwa kukuna kwendalo okanye amanzi afumbe ndaweninye yaye kuqukwa amanzi emvula, amanzi aphantsi komhlaba okanye amanzi equla;

**“isixhobo sokuhlulza izinto ezimdaka”** kubhekiselelwe kuso nasiphi isixhobo esisebenza ngobuchule bomatshini esicoca sihluze ze sikhukhulisele izinto ezimdaka kumjelo wamanzi amdaka okanye amaxolo asuswa kwimifuno, okanye kwezinye izidlo, amaxolo, izikhumba, iinkwane/uqweqwe okanye nantoni na elahlwa ngqo okanye ngandlela ithile kumjelo wamanzi amdaka, kuqukwa nezinto ezimdaka eziphuma kwisixhobo esihluza ukutya okococokileyo koko kuyinkunkuma;

**“amanzi amdaka”** kubhekiselelwe kuyo nayiphi na inkunkuma emanzi, nokuba iqulethe into enyityilikisiweyo yaye kuqukwa nenkunkuma emanzi yasemakhaya nenkunkuma emanzi evela kwimizi-mveliso kodwa akabandakanywa amanzi esitshi,

**“umjelo wamanzi amdaka”** kubhekiselelwe kwizakheko, imijelo ehambisa amanzi amdaka, imibhobho, izivingco, iimpompo, izixhobo zokulinganisa amanzi asetyenzisiweyo okanye nantoni na ehamba nezi ephantsi kolawulo lwebhunga, nenokusetyenziselwa ukuhambisa okanye ukulahlwa kwamanzi amdaka.

**ISIAHLUKO 1**

**UXANDUVA NEMITHETHO ETHINTELWEYO**

**2. Uxanduva lwabanini propati**

(1) Wonke umnini propati emva kokufumana isaziso esibhaliweyo esivela kwiBhunga—

- (a) makokhe umjelo wabucala ophantsi komhlaba ohambisa amanzi amdaka kulo ndawo;
- (b) makanxibelelanise isixhobo sabucala sokufakelwa komjelo ophantsi komhlaba ohambisa amanzi amdaka kumjelo kamasipala ophantsi komhlaba ohambisa amanzi amdaka, nokuba uwunxibelelanise ngqo okanye ngandlela yimbi ngokweemfuno zeBhunga;
- (c) makongeze umthamo wesixhobo sokufakelwa komjelo wabucala ophantsi komhlaba ohambisa amanzi amdaka ukuze ulungelelane nenkunkuma emanzi eyongezelelekileyo, okanye



- (d) makokhe ngokutsha umjelo wabucala ophantsi komhlaba ohambisa amanzi amdaka ukuze uthobele iimfuno zeBhunga.
- (e) kungeniswe yaye kumiselwe isicwangciso solawulo lwenkunkuma kuqukwa phakathi kwezinye izinto ishedyuli yokuncitshiswa kwenkunkuma;
- (f) kungeniswe yaye kumiselwe isicwangciso solawulo lwemichiza kuqukwa phakathi kwezinye izinto nesicwangciso soyilo.
- (2) Akukho mnini propati unokuvumela —
  - (a) ukungena kwamanzi aphantsi komhlaba okanye amanzi esitshi kumjelo wabucala ophantsi komhlaba ohambisa amanzi amdaka kwawakhe amasango,
  - (b) ukuvuza kwamanzi amdaka avela kumjelo wabucala ophantsi komhlaba ohambisa amanzi amdaka kwawakhe amasango,
  - (c) yaye umnini popati ngamnye kuyimfuneko ukuba athabathe amanyathelo afanelekileyo ukuthintelo ukungenzeki kwezi zinto.

### 3. Ukhuseleko lwemijelo kamasipala ophantsi komhlaba ehambisa amanzi amdaka

- (1) Akukho mntu, ngaphandle kokuba ufumene imvume ebhaliweyo yebhunga nangokuxhomekeke kwimiqathango enokumiselwa libhunga, ovumeleke ukuba—
  - (a) okhe, amise okanye enze nasiphi na isakhiwo, isakheko okanye nantoni na ngaphezulu okanye kwindawo, okanye ngendlela eya kuphazamisa okanye eya konakalisa nawuphi na umjelo kamasipala ophantsi komhlaba ohambisa amanzi amdaka;
  - (b) agrumbe, avule okanye asuse umhlaba ongaphezu, okufuphi, ongaphantsi okanye okufuphi nawo nawuphi na umjelo kamasipala ophantsi komhlaba ohambisa amanzi amdaka;
  - (c) konakalisa, afake engozini okanye atshabalalise okanye enze nasiphi na isenzo esinokonakalisa, esinokufaka engozini okanye esinokutshabalalisa nawuphi na umjelo kamasipala ophantsi komhlaba ohambisa amanzi amdaka;
  - (d) onokuvula nawuphi na umngxuma nakuwuphi na umjelo kamasipala ophantsi komhlaba ohambisa amanzi amdaka, okanye arholeamanzi, ajike amanzi okanye abangele ukuba kurholwe amanzi okanye kujikwe amanzi akuwo nawuphi na umjelo ophantsi komhlaba ohambisa amanzi amdaka ukusuka kulowo;
  - (e) ukulahlala, ukuvumela ukuba kungene okanye afake kuwo nawuphi na umjelo kamasipala ophantsi komhlaba ohambisa amanzi amdaka—
    - (i) nawuphi na amanzi esitshi;
    - (ii) nayiphi na igesi okanye ulophu;
    - (iii) nantoni na engamanzi (engengawo amanzi amdaka asendlwini) ekwiqondo lobushushu elingaphezu kwama-40° C;
    - (iv) nayiphi na ipetula, ioli, igrisi, amafutha, okanye amayeza okubulala izitshabalalisi, amayeza okubulala izinambuzane okanye ipeyinti;
    - (v) nayiphi na inkunkuma okanye inkunkuma evela kwimizi-mveliso, kumashishini, kumsebenzi wokwenziwa kwempahla okanye kwemichiza;
    - (vi) nayiphi na into engamanzi ene-pH value obungaphantsi kwe-5,5 nengaphezu kwamashumi amabini;
    - (vii) nantoni na ekhupha okanye enokukhupha izinto ezinokugqabhuka, izinto eziyityhefu okanye igesi okanye ulophu olunokutsha lula;
    - (viii) nantoni na enencam evulekileyo ebizwa ngokuba yi-Abel's open cup flashpoint engaphantsi kwe-60° ;
    - (ix) nantoni na equlethe izinyibilikisi ezinokutsha msinya okanye izinyibilikisi ezingadibaniyo namanzi;
    - (x) nantoni enokuthi, ngokuluvu lwebhunga, ngokwayo okanye xa idityaniswe nayo nayiphi na enye into —
      - (aa) ibangele inkathazo kuye nabani na;
      - (bb) ibeke engozini impilo okanye yenzakalise nabani na;
      - (cc) iphazamise ukuhamba ngokukhululekileyo kwamanzi amdaka ahamba phantsi komhlaba edolophu;
      - (dd) iphembelele ngokonakalisayo nawuphi na umjelo ophantsi komhlaba ohambisa amanzi amdaka okanye imijelo yamanzi amadaka okanye umhlaba ekuxonyekezelwe kuwo nawuphi na umjelo ophantsi komhlaba ohambisa amanzi amdaka okanye nokuhanjiswa, ukucocwa, ukuhlanjula, ukulahlwa okanye ukusetyenziswa ngokutsha kwamanzi amdaka, okanye
      - (ee) nangayiphi na indlela engathandekiyo xa kulahlwa okanye kusetyenziswa ngokutsha amanzi amdaka emva kokucocwa okanye kokuhlanjululwa okanye ekhokelela kumjelo owenziwe ngokungayithobeliyo imiqathango emiselwe ngokwemigaqo yawo nawuphi na umthetho osebenzayo;
  - (f) ukulahlala nantoni na ngaphandle kwenkunkuma ephuma kwimizi-mveliso komnye umjelo wabucala ohambisa amanzi amdaka, kunye
  - (g) kwiimeko apho kufakelwe omnye umjelo wabucala ohambisa amanzi amdaka avela kwimizi-mveliso, kungalahlalwa amanzi amdaka avela kwimizi-mvelisoukuya kweminye imijelo ephantsi komhlaba ehambisa amanzi amdaka.

- (2) IBhunga liya, ngeendleko zomntu lowo okanye abantu abenza umsebenzi—
- wokuchitha, ukulungisa okanye nawuphi na umsebenzi owenziwa kwisakhiwo, kwisakheko okanye nakwintoni na eyokhiweyo, emisiweyo okanye eyenziwe ngokuchasene nemiqathango ekweli candelo;
  - ukugcwalisa nokulungisa nawuphina umhlaba aogrunjiweyo okanye osusiweyo ngokuchasene nemiqathango ekweli candelo;
  - ukulungisa nokulungelelanisa nawuphi na umonakalo owenziwe ngokuchasene nemiqathango yeli candelo okanye ngenxa yokuchaswa kwemiqathango ekweli candelo;
  - ukususa nantoni na elahliweyo, evunyelwe ukuba ingene okanye efakwe kumjelo ophantsi komhlaba ohambisa amanzi amdaka okanye kumsele woluntu ngokuchasene nemiqathango yeli candelo, kunye
  - kususa nantoni na eyonakalisa, esitha okanye eyenza ubungozi okanye enokonakalisa, isithe ibeke engozini okanye itshabalalise nawuphi na umjelo ophantsi komhlaba ohambisa amanzi amdaka.
- (3) Ukuba nabani na akaphumeleli ukuthobela imiqathango emiselwe ngokwemigaqo yecandelwana (2), iBhunga linakho ukuthabatha amanyathelo anokucingelwa njengeayimfuneko ukulungisa lo mbandela ngeendleko zomntu lowo unoxanduva lokwenza oko.
- (4) IBhungaliya, ngeendleko zomnini propati, kususa umjelo oxonyekezelwe kumjelo kamasipala ophantsi komhlaba ohambisa amanzi amdaka nawuphi na umjelo wabucala ophantsi komhlaba ohambisa amanzi amdaka nothi, ngokoluvo lwebhunga, ubeke engozini okanye uphembelele ngokonakalisayo nawuphi na umjelo ophantsi komhlaba ohambisa amanzi amdaka okanye umjelo wamanzi amdaka okanye umhlaba ekuxonyekezelwe kuwo nawuphi na umjelo okanye umsele ohambisa, ococa, ohluza, olahla okanye ekusetyenziswa ngokutsha kuwo amanzi amdaka, yaye kuza kuba yimfuneko ukuba umnini walo propati—
- enze amalungiselelo ayimfuneko ukuze kulahlwe ngokukhuselekileyo amanzi amdaka kumasango alo mnini propati, okanye ukuhanjiswa kwamanzi amdaka esiwa kwiziko ekucocwa kulo amanzi amdaka okanye nakuyiphi na enye indawo efanelekileyo neyamkelweyo libhunga, yaye
  - acoce, alungise, okhe ngokutsha, atshintshe, abeke kwindawo entsha okanye athobele imiqathango enokumiselwa libhunga.

#### 4. Ukucocwa kwemijelo yabucala ephantsi komhlaba ehambisa amanzi amdaka evalekileyo

- IBhunga liya kwenza amalungiselelo okucoca imijelo yabucala ephantsi komhlaba ehambisa amanzi amdaka evalekileyo ngeendleko zomnini propati.
- Kwimeko apho kufunyenwe ukuba umjelo wabucala ophantsi komhlaba ohambisa amanzi amdaka uvalekile, ngenxa yomonakalo okanye ukuvaleka zizibi kufunyenwe kumjelo kamasipala ophantsi komhlaba ohambisa amanzi amdaka, akukho zindleko ziya kuhlawuliswa umnini propati.

### ISIAHLUKO 2

#### AMANZI AMDAKA AVELA KWIMIZI-MVELISO

#### 5. Imvume eyimfuneko ukuze kulahlwe amanzi amdaka avela kwimizi-mveliso

Akukho mntu uvumelekileyo, ngaphandle kokuba ufumene imvume ebhaliweyo yeBhunga, nangokuxhomekeke kwimiqathango enokumiselwa lilo —

- ukulahla okanye ukuvumela ukulahlwa kwamanzi amdaka avela kwimizi-mveliso elahlelwa ngqo okanye ngandlela yimbi kuwo nawuphi na umjelo wamanzi amdaka;
- unokongeza, okanye avumele ukongezwa, komthamo okanye ukutshintsha okanye avumele ukutshintshwa kwenkangeleko, izinto eziqulethweyo okanye ukwakhiwa kwazo nazi iphi izinto ezimdaka ezivela kwimizi-mveliso ngokuchasene nemiqathango emiselwe libhunga, okanye
- Unokwaphula, okanye avumele ukwaphula, kwawo nawuphi na umqathango owamiselwa libhunga xa lalinika imvume yokulahla amanzi amdaka avela kwimizi-mveliso.

#### 6. Ukulahlwa kwamanzi amdaka avela kwimizi-mveliso ngeenqanawa okanye ngezinye iindlela zokuthutha amanzi amdaka

- Kwindawo apho kungeko mijelo kamasipala ephantsi komhlaba ehambisa amanzi amdaka ngenjongo yokulahla amanzi amdaka, akukho mntu uvumelekileyo ukuba alahle amanzi amdaka —
  - ngaphandle kokuba ibhunga liyamkele indlela yokuthuthwa laza lamisela imiqathango eliyicingela njengefanelekileyo ejongene nokulahlwa kwalo manzi amdaka, yaye
  - ngayo nayiphi na enye indlela yokuthutha amanzi ngaphandle kokuba kufunyenwe isiqinisekiso sokwamkelwa esibhaliweyo sinikezelwe kwiimeko nganye ngumntu osemagunyeni kwelo ziko lamkelwe libhunga nalapho lo manzi amdaka okanye isivuliso esilisolotyalo salo manzi amdaka silahlwayo, eso siqinisekiso kuyimfuneko ukuba sigcinwe ze ziveliswe ukuze sihlolwe ngulo mntu uvelise amanzi amdaka okanye iimveliso zawo ubuncinane isithuba sonyaka omnye emva komhla wokulahlwa kwalo manzi amdaka.
- Akukho mntu uthutha amanzi amdaka ngayo nayiphi na indlela ngaphandle kokuthutha amanzi ngeenqanawa uvumelekileyo ukuba —
  - alahle lo manzi amdaka kuyo nayiphi na indawo ngaphandle kwakwindawo yokulahla eyamkelweyo libhunga, okanye
  - ayeke lo manzi amdaka achitheke, avuze okanye athontsize ephuma kuso nasiphi na isiqulathi.

## 7. Imirhumo ephathelele kumanzi amdaka avela kwimizi-mveliso

Nabani na onikwe imvume yokulahlela, okanye ukuvumela ukulahlelwa kwamanzi amdaka avela kwimizi-mveliso kumjelo kamasipala ophantsi komhlaba ohambisa amanzi amdaka, uya kuba noxanduva lokuhlawula umrhumo kwibhunga noya kuthi ubalwe ngokulandela imiqathango yeShedyuli yoku-1 neye-2.

### ISIAHLUKO 3

## 8. Ukurhoxiswa/ukubhangiswa kwemithetho kamasipala

Imithetho kamasipala edweliswe kwiShedyuli ye-3, kungoku nje iyarhoxiswa/iyabhangiswa.

## 9. Ulwaphulo-mthetho nezohlwayo

Nabani na —

- owaphula nawuphi na umqathango walo mthetho kamasipala okanye ongaphumeleliyo ukuthobela nawuphi na umqathango omiselwe ngokwemigaqo yalo mthetho kamasipala;
- owenza intsongelo, oxhathisayo, ophazamisa okanye oma endleleni yakhe nawuphi na uceba, igosa okanye igosa lebhunga xa lisenza umsebenzi walo ngokwemigaqo yalo mthetho kamasipala, okanye
- onika ngabom ulwazi olunmgeyonyaniso okanye ulwazi olulahlekisayo kuye nawuphi na uceba, igosa okanye igosa lebhunga, uya kuba nentyala lolwaphulo-mthetho yaye uya kujongana nokugwetywa ngesohlwayo.

### ISHEDYULI YOKU-1

## 1. Intlawulo engumrhumo ophathelele kumanzi amdaka avela kwimizi-mveliso

Imirhumo echazwe kwiCandelo le-7 lalo mthetho kamasipala, ibalwa ngokwale ndlela ibonakaliswe ngezantsi apha:

- Umrhumo uya kuba, ngokuxhomekeke kwimiqathango elandelayo yale Shedyuli, lixabiso elifunyenwe ngokusebenzisa indlela yokubala ebalwe ngokulandela umbandela oku-(2) ngezantsi.

- Vw (SVC) + Viet (COD-1000/1500) + Viet (S.F.)**

Kuziphi iimeko

“**Vw**” ngumthamo opheleleyo, ochazwa ngokweekhilolutha, umthamo wamanzi amdaka alahlwa evela kwindawo ethile ngelo xesha.

“**SVC**” ngumrhumo womthamo wothungelwano lwemijelo ephantsi komhlaba ohlawulwa ngokulandela imigaqo yerhafu yococeko.

“**Vie**” ngumthamo opheleleyo, ochazwa ngokweekhilolutha, wamanzi amdaka avela kwimizi-mveliso alahlwa kulo ndawo ngelo xesha.

“**T**” lixabiso, elimiselwa libhunga, lokuoca ikhololutha enye (1) yamanzi amdaka.

“**COD**” yimfuneko yemichiza ye-oksijini kumanzi amdaka elinganiselwa ngokweemiligramu ilitha nganye. Kwimeko apho i-COD ingaphantsi kwe-1 000, ifektha ye-COD iyaphelelwa.

“**SF**” yimfuneko yentlawulo eyongeziweyo yamanzi amdaka ebalwa ngokomgaqo wokubala:

$$SF = (X-L)/L$$

kuziphi iimeko —

“**X**” luxinzelelo lwezinto ezithile ezinokungafani kwezinye iimeko ezidweliswe kwiShedyuli ye-2.

“**L**” ngumlinganiselo olungele olo xinzelelo lwento ethile.

- Akukho fektha ibalwa ngokwale ndlela inokuba nexabiso elingaphantsi kwenani unothi/iqanda;

- Kwimeko yoxinzelelo lwe-pH parameter u-X umela ixabiso le-pH yaye, ukuba u-(X-L) unika isiphumo esinentlawulo engenaxabiso, kufuneka itshintshwe intlawulo enexabiso elikhulu ngokulinganayo nelo.

- I-COD yamanzi amdaka avela kwimizi-mveliso ngumlinganiselo weqondo lokubala eliguqukayo kwiisampuli ezine ezithatyathwa nangaliphi na ixesha kwisithuba seenyanga ezintandathu ukuya kwezilishumi elinambini.

- I-SF yamanzi amdaka avela kwimizi-mveliso lelona xabiso limiselwa kamva.

- I-SF yongeza kubo bonke ubuninzi obungaphandle kwemilinganiselo emiselwe kwiShedyuli ye-2.

- Ukuba, nangasiphi na isizathu, inani elifunekayo leesampuli ezichazwe kumbandela we-(3) okanye we-(4) ngasentla alithathwanga, okanye kuthatyathwe iisampuli ezingaphezu kwesine, ibhunga linelungelo lokumisela i-COD ne-SF efanelekileyo.

- Umnini propati/lowo uhleliyo kulo propati kuyo nayiphi na indawo unelungelo lokufumana/ xa enze isicelo, inxalenye yayo nayiphi na isampuli ethatyathiweyo kulo ndawo ngaphambi kokuba lo sampuli isuswe libhunga.

## 2. Ukubalwa kobuninzi bamanzi amdaka avela kwimizi-mveliso alahlwayo

- Ibhunga lilo emisela ubuninzi obupheleleyo bamanzi amdaka avela kwimizi-mveliso anokulahlwa kwindawo nganye.

- (2) Ukuba amanzi amdaka avela kwimizi-mveliso namanye amanzi amdaka alinganiswa ndawonye, ibhunga liya kukuvumela oko xa libona kufanelekile yaye ibubulungisa kwamanye amanzi amdaka.
- (3) Ukuba ubungakanani bamanzi amdaka avela kwimizi-mveliso alahlwa kulo ndawo akalinganiswa ngqo:
- Ibhunga liya kusekezela ixabiso elilimiselayo ngokwexabiso lamanzi asetyenziswa kulo ndawo, emva kouvumela nantoni na eliyicingela ifanelekile ngamanzi asetyenziselwa iinjongo zasendlwini okanye ukunkcenkceshela, amanzi alahleka kumoya ojikelezileyo, okanye kwizinto eziveliswa kule ndawo, yaye
  - ukuba amanzi amdaka avela kwimizi-mveliso alahlwa kula masango alahlwa kwiindawo ezininzi, ibhunga liya kubabela elo xabiso likhankanyiweyo lamanzi kwezo ndawo alahlwa kuzo amanzi ngokuchanekileyo.
- (4) Ukuba isixhobo sokulinganisa siqinisekiswa njengesonakeleyo, ibhunga liya, ngokuxhomekeke kumbandela oku-(5) ngezantsi, kwenza amalungiselelo afanelekileyo okuqwalasela ukonakala kwesixhobo eso xa lisenza izibalo zalo ngobuninzi bamanzi alahlwayo.
- (5) Ibhunga linakho, ngesaziso esibhaliweyo, ukucela ukuba lowo uhleli kulo propati, umnini propati okanye umntu olawulayo kulo ndawo, okanye osebenzisa, nawaphi na amasango ukuba abonelele ngolwazi, indlela yokungena okanye izinto ibhunga elicingela ukuba ziyimfuneko ukuze kubalwe ngokuchanekileyo umrhumo omele ukuhlawulwa, okanye ukuba ingaba ukho kusini na umrhumo ohlawulwa ukusetyenziswa kwalo ndawo.
- (6) Ukuba ibhunga linoluvo lokuba ukuthatyathwa kweesampuli akubonakalisi elona qondo lenene lomgangatho wamanzi amdaka avela kwimizi-mveliso, linakho ukusebenzisa enye indlela eyamkelekileyo lilungiselela ukumisela umrhumo ofanelekileyo nonobulungisa wokulahlwa kwamanzi amdaka avela kwimizi-mveliso.
- (7) Ukuba ibhunga alinakho ukuhlola ubuninzi okanye umrhumo omele ukuhlawulwa ngenxa —
- yokuba inkqubo yokubala echazwe kumbandela 1(2) ngasentla, ayiyomfuneko, kunye/okanye
  - isaziso esichazwe kumbandela 2(5) ngasentla asithotyelwa kunye/okanye,
  - kukho nakuphi ukuchaswa kwalo mthetho kamasipala yaye ngenxa yoko imirhumoo emele ukuhlawulwa ngokubhekiselele kulo ndawo ayibalwanga ngokuchanekileyo,
- ngoko ke ibhunga liya kuhlola umrhumo omele ukuhlawulwa ngokwexabiso elicingelwa njengelifanelekileyo nelobulungisa.
- (8) Nangona kukho ukungavumelani nombandela (7) ngasentla, ibhunga linakho, ngeenjongo zokuhlola nawuphi na umrhumo omiselwe kulo mthetho kamasipala okanye ukuqinisekisa ukuthotyelwa kwayo nayiphi na imiqathango yalo mthetho kamasipala, ngesaziso esibhaliweyo, ukucela ukuba umnini propati wayo nayiphi na indawo, ngexesha elimisiweyo nangeendleko zomnini propati abonelele yaye alondolozwe izixhobo zokulinganisa okanye nezinye izixhobo ezifanelekileyo ezicingelwa njengeziyimfuneko libhunga —
- ukulinganisa umthamo wamanzi asetyenzisiweyo kulo propati nomthamo wamanzi afunyenwe kuwo nawuphi na umthombo ngaphandle kwebhunga;
  - ukulinganisa ngokwahlukeneyo umthamo wamanzi asetyenziselwe nayiphi na injongo eyodwa okanye kwinxalenye ethile yalo propati, yaye
  - kubonelelwe ngesiqinisekiso esanelisa iimfuno zebhunga ukuba nasiphi na isixhobo sokulinganisa amanzi okanye ubuchule obusetyenzisiweyo obuchazwe kumbandela 8(a) nakumbandela 8(b) sisasebenza ngokukuko nangokuchanekileyo.

## ISHEDYULI YE-2

### Izinto ezingamanzi eziThintelweyo ukuba ziLahlwe kwimijelo ephantsi komhlaba ehambisa amanzi amdaka

<i>Icandelo A: Ulwazi Jikelele</i>		Ingabi ngaphantsi	Ingagqithi
1.	Iqondo lobushushu/lokubanda kwindawo alahlwa kuyo amanzi amdaka	0 °C	40 °C
2.	Unikezelo lombane		500 mS/m
3.	Iqondo le-PH kwiqondo elingama-25 °C	5.5	12.0
4.	Imfuneko yeMichiza ene-Oksijini		5 000 mg/ℓ

### *Icandelo B: Izinto eziyimichiza ingezizo zinto ezenziwe ngeSinyithi esoMeleleyo — ubuninzi boxinzelelo*

1.	Izinto eziqinileyo ezizinzileyo (imizuzu engama-60)	50 ml/ℓ
2.	Izinto eziqinileyo eziSasazekileyo	1 000 mg/ℓ
3.	Zizonke ezinyibilika kwiqondo le-105 °C	4 000 mg/ℓ
4.	Iyonke imichiza yeklorin Cl	1 500 mg/ℓ
5.	Iyonke imichiza yesalfure SO <sub>4</sub>	1 500 mg/ℓ
6.	Iyonke imichiza yezichumiso P	25 mg/ℓ
7.	Iyonke ityhefu CN	20 mg/ℓ
8.	Iyonke imbumba yesalfa S	50 mg/ℓ
9.	Iyonke imichiza yefenoli C <sub>6</sub> H <sub>5</sub> OH	50 mg/ℓ
10.	Zizonke iiswekile nesitstshi njengeswekile yediliya	1 500 mg/ℓ
11.	Amafutha enjini, igrisi, amafutha namafutha aqinileyo	400 mg/ℓ
12.	Isiqalelo setyuwa Na	1000 mg/ℓ

**Icandelo C: Izinto ezenziwe ngesinyithi nezinto ezingaphiliyo — ubuninzi boxinzelelo****Iqela loku-1**

1.	Intsimbi Fe	50 mg/ℓ
2.	Isiqalelo esimenyezelayo Cr	10 mg/ℓ
3.	Ikopa Cu	20 mg/ℓ
4.	Izinki Zn	30 mg/ℓ

**Lulonke uxinzelelo lwezinto ezenziwe ngesinyithi kwiQela loku-1 mazingabi ngaphezu kwama-50 mg/ℓ**

**Icandelo C: Izinto ezenziwe ngesinyithi nezinto ezingaphiliyo — lulonke uxinzelelo****Iqela le-2**

5.	Ityhefu As	5 mg/ℓ
6.	Iboron B	5 mg/ℓ
7.	Ilothe Pb	5 mg/ℓ
8.	Iseleniyamu Se	5 mg/ℓ
9.	Imekyuri Hg	5 mg/ℓ
10.	Itayithaniyamu Ti	5 mg/ℓ
11.	Ikhadiyamu Cd	5 mg/ℓ
12.	Inikheli Ni	5 mg/ℓ

**Lulonke uxinzelelo lwezinto ezenziwe ngesinyithi kwiQela le-2 mazingabi ngaphezu kwama-20 mg/ℓ**

**Icandelo D: Izinto ezithintelweyo ezinemitha ebangwa kukuqhekeka kweathom**

Nayiphi na into emdaka enemitha ebangwa kukuqhekeka kweathom okanye izinto ezineeathom ezilinganayo kodwa zohlukile ngobunzima okanye ngokoxinzelelo aziyithobeli imiqathango emiselwe liBhunga kumthetho ongoKhuseleko lweNukleri ochazwe kwiCandelo lama-24 loMthetho ongaMandla eNukleri (uMthetho wama-92 ka-1982) owalungiswayo.

**ISHEDYULI YE-3****IBhunga loLawulo lweNqila yeKapa:**

Iphephandaba loMbuso lePhondo nomb. 5768 elatyikitywa ngowama-21/9/2001: UMthetho kaMasipala ophathelele kulawulo lwamanzi amdaka namanzi amdaka avela kwimizi-mveliso

**UMasipala weSixeko saseKapa:**

P.N.397/1987: Umthetho kamasipala olawula imixokelelwano ehambisa amanzi nothungelwano lwemijelo ephantsi komhlaba, owalungiswayo

**UMasipala wase-Durbanville:**

P.N. 393/1995: Umthetho kamasipala olawula uthungelwano lwemijelo ephantsi komhlaba eyongeziweyo

**UMasipala wase-Fish Hoek:**

P.N. 867/1979: Umthetho kamasipala olawula imixokelelwano ehambisa amanzi nothungelwano lwemijelo ephantsi komhlaba, owalungiswayo

**UMasipala wase-Goodwood:**

P.N. 706/1991: Umthetho kamasipala olawula uthungelwano lwemijelo ephantsi komhlaba P.N. 1048/1971: Umthetho kamasipala ophathelele kulawulo lwamanzi amdaka avela kwimizi-mveliso, owalungiswayo

**UMasipala wase-Gordon's Bay:**

P.N. 570/1963: Umthetho kamasipala olawula amanzi amdaka avela kwimizi-mveliso

**UMasipala wase-Kraaifontein:**

P.N. 253/1990: Umthetho kamasipala olawula amanzi amdaka avela kwimizi-mveliso

**UMasipala wase-Milnerton:**

P.N. 814/1971: Umthetho kamasipala ophathelele kulawulo lothungelwano lwemijelo ephantsi komhlaba eyongeziweyo, owalungiswayo

**UMasipala wase-Pinelands:**

P.N. 486/1939: Umthetho kamasipala ophathelele kulawulo lothungelwano lwemijelo ephantsi komhlaba, owalungiswayo

**UMasipala wase-Simon's Town:**

P.N. 771/1985: Umthetho kamasipala ophathelele kulawulo lwamanzi amdaka avela kwimizi-mveliso

**UMasipala wase-Somerset West:**

P.N. 946/1978: Umthetho kamasipala olawula imixokelelwano ehambisa amanzi nothungelwano lwemijelo ephantsi komhlaba, owalungiswayo P.N. 654/1983: Umthetho kamasipala ophathelele kulawulo lwamanzi amdaka avela kwimizi-mveliso

**UMasipala wase-Strand:**

P.N. 533/1983: Umthetho kamasipala ophathelele kulawulo lwamanzi amdaka avela kwimizi-mveliso

**UMasipala woSinga-siqithi okuNxweme oluseNtshona:**

P.N. 501 1996: Umthetho kamasipala ophathelele kulawulo lothungelwano lwemijelo ephantsi komhlaba

**IBhodi elawula iDolophana yase-Brackenfell:**

P.N. 575/1950, OG 2497, 29 Septemba 1950: IMiqathango eseMthethweni elawula iMijelo yaManzi

**IBhodi elawula iDolophana yase-Brackenfell:**

P.N. 75, OG 3494, 24 Janyuwari 1969: IMiqathango ephathelele kwiitanki ezigcina amanzi

**UMasipala wase-Brackenfell:**

P.N. 522/1971, OG 3618, 28 Meyi 1971: IMiqathango eyoNgeziweyo elawula iMijelo yaManzi

**IBhunga leeNkonzo zamanzi kuMmandla weNtshona Koloni:**

P.N. 776/1993: Umthetho kamasipala olawula amanzi amdaka avela kwiMizi-mveliso