

**DR BEYERS NAUDE LOCAL MUNICIPALITY: WATER AND
SANITATION BY-LAW, 2023**



**Adopted by the Dr Beyers Naude Municipal Council
On**

..... 2023

WATER SUPPLY AND SANITATION SERVICES BY-LAW

[LOCAL AUTHORITY NOTICE NO. 249 OF 2006.]

[DATE OF COMMENCEMENT: 11 DECEMBER 2006.]

This By-law was published in *Provincial Gazette* No. 1634 dated 11 December 2006.

DR BEYERS NAUDÉ LOCAL MUNICIPALITY WATER SUPPLY AND SANITATION SERVICES BY-LAW

MANDATE

To provide for the supply of water by the Municipality; to establish levels of supply; to provide for measures to protect water installations and for the approval of work on water installations; to provide for water supply matters relating to the development of property; to set requirements for the establishment, testing, disinfection and use of water installations; to provide measures to prevent the undue consumption and the pollution of water; to provide special measures for fire installations; to provide for payment for water supplied; to create offences and penalties; to provide for the repeal of laws and savings; and to provide for matters incidental thereto. To monitor all water consumption from all sources e.g., piped water, surface water, ground water, reused / recycled water sources; to promote water use efficiency; to track and monitor water usage and develop water consumption baselines for large water users; to monitor water use performance and investigate deviations and to meter all water use.

PREAMBLE

WHEREAS the Dr Beyers Naude Local Municipal Council (BNLM) recognizes that water is needed by people, plants and animals to survive, and that water is necessary for social and economic development, to create jobs, for recreation and for health, religious and spiritual purposes; and affirms chapter 2 of the Constitution and paragraph 24 of the Bill of Rights, which address the right to an environment that is not harmful to health or well-being and to protect the environment, for the benefit of present and future generations, through reasonable legislative and other measures that promote conservation and secure ecologically sustainable development and the use of natural resources whilst recognizing the need for a water legacy by maintaining and protecting water sources and access to water for future generations.

WHEREAS the BNLM Council recognizes that, as a water services authority, it has a duty to all customers or potential customers in its area of jurisdiction to progressively ensure efficient, affordable, economical and sustainable access to clean water services;

WHEREAS the BNLM Council recognizes–

- (a) the need to regulate access to water services in an equitable way, taking into account financial, technological, socio-economic and conservation factors;
- (b) the duty of customers to pay reasonable charges;
- (c) the right of the water services authority to limit or discontinue the provision of water services if there is a failure to comply with reasonable conditions set for the provision of such services;
- (d) the need to manage the conflict between different uses and users in different catchments;
- (e) the need to provide a means of providing access to water services to those who are still without such access;
- (f) the need to maintain and improve services already supplied in a sustainable manner;
- (g) the need to provide various measures to assist those who are economically unable to meet normal service charges; and
- (h) the need to provide water services in support of all forms of economic development and to carry out the above in a manner which supports the preservation of impacted ecosystems.

WHEREAS the Water Services Act establishes the Municipality as a water services authority and Municipality's Water Unit as a water services provider for the Municipality's area of jurisdiction;

WHEREAS the BNLM Council has competence in terms of Part B of Schedule 4 of the Constitution of the Republic of South Africa, 1996 relating to such matters as the control of the provision of water services;

WHEREAS the BNLM Council has competence, in terms of section 156(2) of the Constitution of the Republic of South Africa, 1996 to make and administer By-laws for the effective administration of the matters which it has the right to administer;

AND WHEREAS the BNLM has a duty to make By-laws for the provision of water services in terms of section 21 of the Water Services Act;

NOW THEREFORE the BNLM Council, acting in terms of section 156 read with Part B of Schedule 4 of the Constitution of the Republic of South Africa, 1996 and read with section 11 of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000), under the provisions of sections 3 (1) and 21 of the Water Services Act, 1997 (Act 108 of 1997), the Dr Beyers Naude Local Municipality, enacts as below.

TABLE OF CONTENTS

1. Definitions
2. Principles and objectives
3. Interpretation of By-law

CHAPTER 1 APPLICATION, PAYMENT AND TERMINATION

4. Customer Care and Revenue Management By-laws apply

CHAPTER 2 APPOINTMENT: WATER SERVICES PROVIDERS

5. Appointment of water services provider
6. Water services provider - approval
7. Application for approval
8. Additional information to make decision
9. Procedure on approval
10. Water scheme categories
11. Water services provider categories
12. Monthly report
13. Quarterly report
14. Disputes

15. Service levels

CHAPTER 3 SERVICE LEVELS

CHAPTER 4 CONDITIONS FOR WATER SUPPLY SERVICES

Part 1

Connection to water supply systems

16. Application for water service
17. Special agreements for water services
18. Change in purpose for which water services are used
19. Provision of connection pipe
20. Location of connection pipe
21. Provision of single water connection for supply to several consumers on same premises

22. Interconnection between premises or water installations
23. Disconnection of water installation from connection pipe
24. Communal water services works and provision of water serviceswork for water supply to several consumers
25. Temporary supply from water supply system

Part 2
Standards and conditions of supply

26. Quantity, quality and pressure
27. General conditions of supply
28. Testing of pressure in water supply system
29. Pollution of Municipality's water supply
30. Owner to prevent pollution of water
31. Water restrictions
32. Specific conditions of supply

Part 3
Measurement

33. Measuring of quantity of water supplied
34. Quantity of water supplied to consumer
35. Special measurement
36. Sampling of water
37. Supply of non-potable water by Municipality
38. Pipes in streets or public places

Part 4 Audit

39. Water audit audit

Part 5
Installation work

40. Approval of installation work
41. Persons permitted to do installation and other work
42. Technical requirements for water installation
43. Provision and maintenance of water installations
44. Use of pipes and water fittings to be authorized
45. Labelling of terminal water fittings and appliances

46. Water demand management

*Part 6
Communal water supply services*

47. Provision of water supply to several consumers

*Part 7
Temporary water supply services from fire hydrant*

48. Water supplied from fire hydrant

Part 8 Boreholes

49. Notification of boreholes

*Part 9
Fire services connections*

50. Connection to be approved by Municipality

51. Special provisions

52. Dual and combined installations

53. Connection pipes for fire extinguishing services

54. Valves and meters in connection pipes

55. Meters in fire extinguishing connection pipes

56. Sprinkler extinguishing installations

57. Header tank or double supply from main

58. Sealing of private fire hydrants

**CHAPTER 5
CONDITIONS FOR SANITATION SERVICES**

*Part 1
Connection to sanitation system*

59. Obligation to connect to sanitation system

60. Standards for sanitation services

61. Objectionable discharge to sewage disposal system

*Part 2
On-site sanitation services and associated services*

62. Application for infrastructure

63. Use of on-site sanitation services not connected to sanitation system

64. Septic tanks and on-site sewage treatment plants

65. French drains

66. Conservancy tanks

67. Operation and maintenance of on-site sanitation services

68. Disused conservancy and septic tanks
69. Services associated with on-site sanitation services
70. Charges in respect of services associated with on-site sanitation services

Part 3
Sewage disposal

71. Provision of connecting sewer
72. Location of connecting sewer
73. Provision of one connecting sewer for several consumers on same premises
74. Interconnection between premises
75. Disconnection of draining installation from connecting sewer

Part 4
Standards and Conditions of Supply

76. Standard for sanitation services
- 77.

Part 5
Methods for determining discharges

78. Measurement of quantity of standard domestic effluent discharged
79. Measurement of quantity and determination of quality of industrial effluent discharged
80. Reduction in measured quantity of effluent discharged

Part 6
Drainage installations

81. Installation of drainage installations
82. Construction or installation of drainage installations
83. Disconnection of drainage installations
84. Drains in streets or public places
85. Construction by Municipality
86. Maintenance of drainage installation
87. Technical requirements for drainage installations
88. Drains
89. Sewer blockages
90. Grease traps
91. Industrial grease traps
92. Mechanical appliances for lifting sewage
93. Installation of pre-treatment facility

Part 7

Protection of infrastructure

- 94. Protection from ingress of flood waters
- 95. Trespassing on sewage disposal system
- 96. Interference with sewage disposal system
- 97. Damage to sewage disposal system
- 98. Consequential maintenance of sewers
- 99. Obstruction to access to sewage disposal system
- 100. Work by private person

*Part 8
Industrial effluent*

- 101. Application for disposal of industrial effluent
- 102. Approval to discharge industrial effluent
- 103. Letter of approval
- 104. Unauthorized discharge of industrial effluent
- 105. Quality standards for disposal of industrial effluent
- 106. Conditions for disposal of industrial effluent
- 107. Withdrawal of approval to discharge industrial effluent

*Part 9
Sewage delivered by road haulage*

- 108. Acceptance of sewage delivered by road haulage Approval for delivery of sewage by road haulage
- 109. Conditions for delivery of sewage by road haulage
- 110. Withdrawal of permission for delivery of sewage by road haulage

*Part 10
Other sanitation services*

- 111. Stables and similar premises
- 112. Mechanical food-waster or other disposal units

*Part 11
Installation work of sanitation sewers*

- 113. Approval of installation work
- 114. Persons permitted to do installation and other work
- 115. Use of pipes and water fittings to be authorized
- 116. Testing of drainage installations
- 117. Cisterns

CHAPTER 6

WATER SERVICES INTERMEDIARIES

- 118. Application for registration
- 119. Additional information to make decision
- 120. Approval of application
- 121. Provision of water services
- 122. Charges for water services provided

CHAPTER 7 UNAUTHORIZED WATER SERVICES AND RELATED MATTERS

- 123. Unauthorized use of water services
- 124. Interference with infrastructure for provision of water services
- 125. Obstruction of access to infrastructure for provision of water services
- 126. Waste of water unlawful
- 127. Unauthorized and illegal discharges
- 128. Illegal connection
- 129. Interference with infrastructure
- 130. Use of water from sources other than water supply system provided by Municipality

CHAPTER 8 ENFORCEMENT

- 131. Responsibility for compliance with By-laws
- 132. Notice of compliance and representations
- 133. Costs

CHAPTER 9 MISCELLANEOUS PROVISIONS

- 134. Provision of information
- 135. Appeal
- 136. Authentication and serving of notices and other documents
- 137. Offences
- 138. *Prima facie* evidence
- 139. Power of entry and inspection
- 140. Indemnification from liability
- 141. Exemption
- 142. Availability of By-laws
- 143. Conflict of law
- 144. Co-operation between municipalities and application
- 145. Liaison forums in community

- 146. Transitional arrangements
 - 147. Repeal of existing water services by-laws
 - 148. Short title and commencement
-
- Schedule 1. Quality standards
 - Schedule 2. Values
 - Schedule 3. Application form for the discharge of industrial effluent to the municipality's sanitation system
 - Schedule 4. Formula for the calculation of effluent discharge charges.

1. Definitions.

In this By-law, unless the context otherwise indicates:

"accommodation unit" in relation to any premises, means a building or section of a building occupied or used or intended for occupation or use for any purpose;

"Act" means the Water Services Act, 1997 (Act 108 of 1997);

"approved" means approved by the Municipality in writing;

"area of supply" means any area within or partly within the area of jurisdiction of the Municipality to which waterservices are provided;

"authorized agent" means-

- (a) any person authorized by the Municipality to perform any act, function or duty in terms of, or exercise any power under this By-law;
- (b) any person to whom the Municipality has transferred the performance of certain rights, duties and obligations in respect of providing water services; or
- (c) any person appointed by the Municipality in terms of a written contract as a services provider to provide water services to consumers on its behalf, to the extent authorized in such contract;

"authorized official" has the meaning assigned to the word "officer" in section 1 of the Customer Care and Revenue Management By-laws;

"average consumption" means the average water consumption of a consumer of a municipal service during a specific period, which consumption is calculated by dividing the total measured consumption of that municipal service during the specific period by the specific number of periods of consumption;

"best practicable environmental option" means the option that provides the most benefit or causes the least damage to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term;

"backflow" means the flow of water in any pipe in a direction opposite to the normal direction of flow;

"back siphonage" means the backflow of water resulting from negative pressures in a water installation or in the water supply system;

"borehole" means a hole sunk into the earth for the purpose of locating, abstracting or using subterranean water, distinguished from wellpoints, eductor wells and sump pumping;

"Building Regulations" means the National Building Regulations made under the National Building Regulations and Building Standards Act, 1977 (Act 103 of 1977);

"capacity" in relation to a storage tank means the volume of the tank between the operating water level of the tank and the invert of the outlet from the tank;

"chase" means a space or groove in a masonry wall or through a floor for pipes or ducts;

"charges" means the rate, charge, tariff, flat rate or subsidy determined by the Municipality;

"cleaning eye" means any access opening to the interior of a discharge pipe or trap provided for the purposes of internal cleaning;

"combined installation" means a water installation used for fire-fighting and domestic, commercial or industrial purposes;

"commercial consumer" means any consumer other than a domestic consumer and indigent consumer, including, without limitation, business, industrial, governmental and institutional consumers;

"commercial purposes" means for the purpose of carrying on a business or trade;

"communal water services work" means a consumer connection through which services are supplied to more than one person;

"connecting point" means the point at which the drainage installation joins the connecting sewer;

"connecting sewer" means a pipe owned by the Municipality and installed by it for the purpose of conveying sewage from a drainage installation on a premises to a sewer beyond the boundary of those premises or within a servitude area or within an area covered by a way-leave or by agreement;

"connection" means the point at which a consumer gains access to water services;

"connection pipe" means a pipe, the ownership of which is vested in the Municipality and installed by it for the purpose of conveying water from a main to a water installation, and includes a "communication pipe" referred to in SABS 0252 Part I;

"conservancy tank" means a covered tank used for the reception and temporary retention of sewage and which requires emptying at intervals;

"Constitution" means the Constitution of the Republic of South Africa, 1996;

"Council" means the BNLM Council, a municipal council referred to in section 157(1) of the Constitution;

"credit authority" means any arrangement made by written agreement for the payment of any arrears in instalments, concluded between a customer and the Municipality;

"customer" means a person with whom the Municipality has concluded a services agreement for the provision of a municipal service as provided to the premises of which such person is an

owner, including any person who is authorised by the owner to enter into such an agreement with the Municipality in respect of the owner's premises as provide for in the Customer Care and Revenue Management By-laws,

"Customer Care and Revenue Management By-laws" means the Customer Care and Revenue Management By-laws of the Municipality;

"delivery system" means a water delivery mechanism, which delivers a predetermined quantity of water to a consumer on agreed terms;

"determined" means determined by the Municipality by resolution and published in the *Provincial Gazette*; **"domestic consumer"** means a consumer using water for domestic purposes and producing domestic sewage;

"domestic purposes" in relation to the supply of water means water supplied for drinking, ablution and culinary purposes to premises used predominantly for residential purposes;

"drain" means that portion of the drainage installation that conveys sewage within any premises;

"drainage installation" means a system situated on any premises and vested in the owner thereof and which is used for or intended to be used for or in connection with the reception, storage, treatment or conveyance of sewage on that premises to the connecting point and includes drains, fittings, appliances, septic tanks, conservancy tanks, pitlatrines and private pumping installations forming part of or ancillary to such systems;

"drainage work" includes any drain, sanitary fitting, water supplying apparatus, waste or other pipe or any work connected with the discharge of liquid or solid matter into any drain or sewer or otherwise connected with the drainage of any premises;

"duly qualified sampler" means a person who is authorized to take samples for analysis from the sewage disposal system, and stormwater disposal system, from public waters, bulk water supply sources, water treatment works, water reticulation systems and natural water sources and who has been certified to do so by an authorized agent;

"DWS" means the Department of Water and Sanitation;

"dwelling unit" means an interconnected suite of rooms, including a kitchen or scullery, designed for occupation by a single family, irrespective of whether the dwelling unit is a single building or forms part of a building containing two or more dwelling units;

"effluent" means any liquid wastewater from sewers or industrial outfalls that flows directly into surface waters either untreated or after being treated at a facility and whether or not containing matter in solution or suspension;

"emergency" means any situation that poses a risk or potential risk to life, health, the environment or property;

"environmental cost" means the cost of all measures necessary to restore the environment to its condition prior to the damaging incident;

"estimated consumption" means the deemed consumption by a consumer whose consumption is not measured during a specific period, which estimated consumption is rationally determined taking into account at least the consumption of water supply services for a specific level of service during a specific period in the area of supply of the Municipality;

"finished ground level" means the level of the earth or any other surface on the ground;

"fire installation" means a potable water installation that conveys water for fire-fighting purposes only, and "fire hydrant" has a similar meaning;

"fixed charge" means the average fixed cost per consumer associated with providing water services in a continuous, effective and efficient manner;

"fixed quantity water delivery system" means a water installation, which delivers a fixed quantity of water to a consumer in any single day;

"flow limiter" means an electronic device which allows for a normal flow rate but restricts the daily volume to a pre-set amount as determined by the Municipality;

"flow restrictor" means a washer which is installed in the water connection which allows a daily consumption of approximately 360 litres in a six-hour period but at a low flow rate;

"french drain" means a soil soak pit for the disposal of sewage and effluent from a septic tank;

"general installation" means a water installation which conveys water for domestic, commercial or industrial purposes;

"Head of Department" means the person appointed by the Municipality as the head of the municipal department responsible for the supply of water;

"high strength sewage" means industrial sewage with a strength or quality greater than standard domestic effluent in respect of which a specific charge 14 may be charged;

"household" means a traditional family unit, as determined by the Municipality from time to time taking into account the number of persons comprising a household, the relationship between the members of a household, the age of the persons who are members of the household and any other relevant factor;

"illegal connection" means a connection to any system through which water services are provided that is not authorized or approved by the Municipality;

"industrial effluent" means effluent emanating from the use of water for industrial purposes and includes for purposes of this By-law any effluent other than standard domestic effluent or stormwater;

"industrial purposes" in relation to the supply of water means water supplied to any premises which constitutes a factory as defined in the General Administrative Regulations, published in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993);

"installation work" means any work done in respect of a water services installation, including the construction, rehabilitation, improvement and maintenance thereof;

"ISO 6509 of 1981" means the International Standards Organisation's requirements relating to the determination of dezincification of brass;

"JASWIC" means the Joint Acceptance Scheme for Water Installation Components;

"leak period" means either the metering period—

- (a) immediately before the date on which a leak is repaired; or
- (b) during which a leak is repaired,

Provided that the leak period does not exceed 65 days;

"manhole" means any access chamber to the interior of the sewer provided for the purpose of maintenance and internal cleaning;

"main" means a pipe, other than a connection pipe, of which the ownership vests in the Municipality and which is used by it for the purpose of conveying water to consumers;

"measuring device" means any method, procedure, process, device, apparatus or installation that enables the quantity of water services provided to be quantified and includes any method, procedure or process whereby the quantity is estimated or assumed;

"member" means a constituent part of a structural whole;

"meter" means a water meter as defined by the Regulations published in terms of the Trade Metrology Act, 1973 (Act 77 of 1973) or, in the case of water meters of sizes greater than 100 mm, a device which measures the quantity of water passing through it, including a pre-paid water meter;

"metering period" means the time interval between two successive billed meter readings but excludes any leak periods;

"municipal account" has the meaning assigned to it in section 1 of the Customer Care and Revenue Management By-laws;

"municipality" means the Municipality of Camdeboo established in terms of section 12 of the Municipal Structures Act, 117 of 1998, and includes any political structure, political office bearer, duly authorised agent or any employee acting in connection with this By-law by virtue of a power vested in the municipality and delegated or sub-delegated to such political structure, political office bearer, *agent* or employee;

"municipal manager" means the person appointed as the municipal manager of the Municipality by the Municipality in terms of section 82 of the Local Government Municipal Structures Act, 1998 (Act 117 of 1998), and includes any person-

- (a) acting in such position; and
- (b) to whom the municipal manager has transferred a power, function or duty in respect of such a power, function or duty;

"municipal services" has the meaning assigned to it in section 1 of the Customer Care and Revenue Management By-laws;

"occupier" has the meaning assigned to it in section 1 of the Customer Care and Revenue Management By-laws;

"on-site sanitation services" means any sanitation services other than water borne sewerage disposal through a sewerage disposal system;

"operating water level" means the level of water reached in a storage tank when the valve controlling the inlet of water to the tank closes under normal operating conditions;

"owner" means—

- (a) the person who is the registered owner of the premises in the relevant Deeds Office;
- (b) where the registered owner of the premises is insolvent or dead, or is under any form of legal disability whatsoever, the person in whom the administration and control of his or her estate is vested as curator, trustee, executor, administrator, judicial manager, liquidator or other legal representative;

- (c) where the Municipality is unable to determine the identity of such person, a person who is entitled to the benefit of the use of the premises or a building or buildings on the premises;
- (d) where such premises have been leased for a period of 30 years or longer, the lessee of the premises; or
- (e) in relation to—
- (f) a piece of land delineated on a sectional plan registered in terms of the Sectional Titles Act, 1986 as common property, the developer or the body corporate in respect of the common property; or
- (g) a section as defined in the Sectional Titles Act, 1986, 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" means any person, whether natural or juristic and includes, but is not limited to a local government body, a company or close corporation incorporated under any law, a body of persons whether incorporated or not, a statutory body, public utility body, voluntary association or trust;

"plumber" means a person who has passed a qualifying trade test in plumbing or has been issued with a certificate of proficiency in terms of the Manpower Training Act, 1981 (Act 56 of 1981), or such other qualification as may be required under national legislation;

"pollution" means the introduction of any substance into the water supply system, a water installation or a water resource that may make the water harmful to health or the environment or impair its quality for the use for which it is normally intended as defined in the National Water Act No. 36, which requires water users to avoid/minimize pollution of water;

"premises" means any piece of land whose external surface boundaries are delineated on by a—

- (a) general plan or diagram registered in terms of the Land Survey Act, 1927 (Act No. 9 of 1927) or in terms of the Deeds Registries Act, 1937 (Act No. 47 of 1937); or
- (b) sectional plan registered in terms of the Sectional Titles Act; and
- (c) a register held by a tribal authority or in accordance with a sworn affidavit made by a tribal authority;

"prescribed" means as determined by resolution of the Council;

"prescribed charge" means a charge prescribed by the Municipality;

"professional Engineer" means a person registered in terms of the Engineering Profession Act, 2000 (Act 46 of 2000), as a professional engineer;

"Provincial Gazette" means the official Gazette of the province concerned;

"public notice" means publication in appropriate media that may include one or more of the following-

- (a) publication of a notice, in the official languages determined by the Municipality-
 - (i) in any local newspaper or newspapers circulating in the area of supply of the

Municipality;

- (ii) in the newspaper or newspapers circulating in the area of supply of the Municipality determined by the Municipality as a newspaper of record;
- (iii) by means of radio broadcasts covering the area of supply of the Municipality; or
- (iv) displaying a notice at appropriate offices and pay-points of the Municipality; or
- (v) communication with consumers at public meetings and ward committee meetings;

"public water" means any river, watercourse, bay, estuary, the sea and any other water to which the public has the right of use or access;

"registered contractor" means a person who is registered with the Municipality as an approved contractor in accordance with Chapter 7 of this By-law;

"responsible plumber" means a person who is registered with the Municipality as an approved plumber in accordance with this By-law;

"SABS" means that South African Bureau of Standards established in terms of the Standards Act, 1945 (Act No. 24 of 1945);

"SABS specification 241-1971" means the Water for Domestic Supplies specifications published in the *Government Gazette* under General Notice 463 dated 9 July 1982;

"sanitation services" has the meaning assigned to it in section 1 of the Act and includes for purposes of this By-law the disposal of industrial effluent;

"sanitation system" means the structures, pipes, valves, pumps, meters or other appurtenances used in the conveyance through the sewer reticulation system and treatment at the sewage treatment plant under the control of the Municipality and which may be used by it in connection with the disposal of sewage, and "sewage disposal system" has the same meaning;

"schedule of accepted pipes and water fittings" means the list of approved pipes and water fittings for use in water installations as prescribed by the Municipality, together with any conditions relating to the use of such pipes or fittings;

"Sectional Titles Act" means the Sectional Titles Act, 1986 (Act No. 95 of 1986);

"septic tank" means a water tight tank designed to receive sewage and to effect the decomposition of organic matter in sewage by bacterial action;

"service agreement" means the contractual relationship between the Municipality and a consumer, whether written or deemed as provided for in section 5 (3) of the Customer Care and Revenue Management By-laws;

"service pipe" means a pipe which is part of a water installation provided and installed on any premises by the owner or occupier and which is connected or to be connected to a connection pipe to serve the water installation on the premises;

"sewage" means waste water, industrial effluent, standard domestic effluent and other liquid waste, either separately or in combination, but does not include stormwater;

"**sewer**" means any pipe or conduit which is the property of or is vested in the Municipality and which may be used for the conveyance of sewage from the connecting sewer, and does not include a drain as defined;

"**shared consumption**" means the consumption of a consumer of a municipal service during a specific period, which consumption is calculated by dividing the total metered consumption of that municipal service within the supply zone within which a consumer's premises are situated for the same period by the number of consumers within that supply zone, during the same period;

"**standpipe**" means a connection through which water is supplied in a public space or a yard, and which is supported by various means, in a vertical or near vertical position, with a stopcock at its end;

"**standard domestic effluent**" means domestic effluent with prescribed strength characteristics as determined by the Municipality in respect of chemical oxygen demand and settleable solids as being appropriate to sewage discharges from domestic premises within the jurisdiction of the Municipality, but shall not include industrial effluent;

"**storage tank**" means a tank forming part of a water installation and used for the storage of water, but excludes a—

- (a) cistern serving a water-closet pan or a urinal; and
- (b) tank used for the storage of hot water;

"**stormwater**" means water resulting from natural precipitation or accumulation and includes rainwater, subsoilwater or spring water;

"**terminal water fitting**" means a water fitting at an outlet of a water installation that controls the discharge of water from a water installation;

"**trade premises**" means premises upon which industrial effluent is produced;

"**trap**" means a pipe fitting or portion of a sanitary appliance designed to retain in position a water seal which serves as a barrier against the flow of foul air or gas;

"**unauthorized services**" means receipt, use or consumption of any water services which is not in terms of a services agreement, or authorized or approved by the Municipality;

"**waste water**" means waste water resulting from the supply of water to a household, offices, shops or any other premises other than industrial premises;

"**water fitting**" means a component of a water installation, other than a pipe, through which water passes or in which it is stored;

"**water installation**" means the pipes and water fittings which are situated on any premises and ownership of which vests in the owner thereof and used or intended to be used in connection with the use of water on such premises, and includes a pipe and water fitting situated outside the boundary of the premises, which either connects to the connection pipe relating to such premises or is otherwise laid with the permission of the Municipality;

"**Water Services Authority**" means a local authority duly established in accordance with law and appointed as Water Services Authority;

"**Water Services Provider**" has the meaning assigned to it in section 1 of the Act, and includes—

- (a) an entity established or appointed by the Municipality as its authorized agent to operate

and maintain a water supply scheme in accordance with these By-laws and in accordance with the Act; and

- (b) the Municipality where it has not appointed an agent to act as water services provider on its behalf and fulfills this duty itself;

"water services" means water supply services and sanitation services;

"water supply services" has the same meaning assigned to it in section 1 of the Act and includes, for purposes of this By-law, water for industrial purposes and fire extinguishing services;

"water supply system" means the structures, aqueducts, pipes, valves, pumps, meters or other apparatus relating thereto of which the ownership vests in the Municipality and which are used or intended to be used by it in connection with the supply of water, and includes any part of the system;

"water use efficiency" means reducing consumption and the environmental impact of water use for the production of goods and services at every stage of the value chain and of water service provision. It means responsible use of fresh water and minimizing wastewater as a result.

"water Re-use and Recycling" means reclaiming water from a variety of sources and treating and reusing it for beneficial purposes such as agriculture and irrigation, potable water supplies, groundwater replenishment, industrial processes, and environmental restoration.

"working day" means a day other than a Saturday, Sunday or public holiday.

2. Principles and Objectives.

(1) The Municipality adopts the following principles-

- (a) The Municipality recognises that all consumers have the right of access to basic water supply and basic sanitation in the area of jurisdiction of the Municipality within an environment not harmful to human health or well-being;
- (b) the Municipality acknowledges that it has the authority to administer water supply services and sanitation services and arising therefrom a concomitant duty to ensure the supply of water services of an acceptable quality within its area of jurisdiction in an efficient, affordable, economical and sustainable manner for subsistence and sustainable economic activity;
- (c) the Municipality recognizes that, in striving to provide water services it, together with all role-players in the sector and all spheres of government, must observe and adhere to the principle of co-operative governance;
- (d) the Municipality acknowledges the requirement to draft and promulgate by-laws to govern the provision of water services to its consumers and to govern the relationship between it and its consumers within its area of jurisdiction;
- (e) the Municipality recognizes that, in the supply of water services, the interests of the consumers and the broader goals of public policy must be promoted;
- (f) the Municipality acknowledges that there is a duty upon it to prepare and adopt a water services development plan for its area of jurisdiction after thorough consultation with all stakeholders and thereafter to update, manage and report thereon on an annual basis;

- (g) the Municipality recognises that the provision of water supply services and sanitation services, although an activity distinct from the overall management of water resources, must be undertaken in a manner consistent with the broader goals of water resource management;
 - (h) the Municipality through its Customer Care and Revenue Management By-laws recognises its duty in terms of regulation 16 of Regulation 22355 promulgated in terms of the Act on 8 June 2001, to have a consumer service to which non-compliance with the provisions of above Regulation, as contained in this By-law, can be reported;
 - (i) the Municipality confirms its duty to provide access to water services in an orderly manner within the nation's available water resources.
- (2) The Municipality, in this By-law strives to-
- (a) provide for the rights of access to basic water supply and basic sanitation within its area of jurisdiction, as contemplated in section 27 (1) (b) of the Constitution of the Republic of South Africa, 1996, and regulations 2 and 3 of Regulation 22355 promulgated in terms of the Act on 8 June 2001;
 - (b) provide for the establishment of a regulatory framework within which to deliver water services;
 - (c) provide for the setting of terms and conditions to ensure compliance with the legislation relating to the water sector;
 - (d) provide for the monitoring of water services within its area of jurisdiction, and being the Water Services Authority and Provider as provided for in terms of the Act, within its area of jurisdiction, where necessary, to provide for-
 - (i) the gathering of information within its area of jurisdiction;
 - (ii) the collation thereof to a central data base; and
 - (iii) the distribution of information to all stakeholders and role-players; and provide for matters related to the supply of water services within its area of jurisdiction.
 - (iv) Interpretation of By-law-

If there is a conflict of interpretation between the English version of this By-law and a translated version, the English version prevails.

**CHAPTER 1
APPLICATION, PAYMENT AND TERMINATION**

3. Customer Care and Revenue Management By-laws apply.

This By-law applies to all areas which fall under the jurisdiction of the BNLM and is binding on all persons to the extent applicable. The provisions of the Municipality's Customer Care and Revenue Management By-law apply to all matters relating to and incidental to-

- (a) the application for and supply of municipal services;
- (b) municipal service agreements;
- (c) the payment and non-payment of a municipal accounts; and
- (d) the limitation and termination of water services.

CHAPTER 2
APPOINTMENT: WATER SERVICES PROVIDERS

4. Appointment of water services provider.

- (1) Subject to compliance with the provisions of section 78 of the Municipal Systems Act, No. 32 of 2000, the Water Services Authority may elect to perform the function of a Water Services Provider itself or it may enter into a written contract with a Water Services Provider as authorised agent, or form a joint venture with another water services institution to provide water services within its area of jurisdiction.
- (2) When performing the function of a Water Services Provider as authorised agent, a Water Services Authority must manage and account separately for those functions.
- (3) When the Water Services Authority appoints a Water Services Provider as authorised agent to provide water services on its behalf the said Water Services Provider shall be designated as the authorised agent of the Water Services Authority and thereby shall be enabled as Water Services Provider to fulfil the said function as Water Services Provider on behalf of the Water Services Authority in terms of the contract entered into between the Water Services Authority and Water Services Provider.
- (4) When the Water Services Authority decides not to perform the function of a Water Services Provider for any local Municipality within its jurisdiction it may appoint the said local Municipality as its Water Services Provider as authorised agent and shall then and thereafter enter into a written contract with the said local Municipality to provide water services within the local Municipality's area of jurisdiction, in line and in accordance with this By-law.
- (5) If, after carrying out an assessment in terms of section 78 of the Municipal Systems Act, No. 32 of 2000, it is decided by the Water Services Authority not to act as the Water Services Provider in respect of such area of jurisdiction or of a specific water scheme and the said Water Services Authority decides not to appoint a local Municipality or a state or parastatal entity, as its Water Services Provider as authorised agent then it may, in respect of any water scheme established or to be established in its area of jurisdiction as contemplating in section 19 (1) (a) of the Act, by public notice, call for proposals from suitable persons or institutions to seek the approval of the Water Services Authority to be the Water Services Provider as authorised agent in respect of such water scheme as contemplated in section 22 (1), read with section 19 (1) (b), of the Act.

5. Water services provider - approval.

- (1) The public notice referred to in section 4 (5) shall be delivered to every public sector Water Services Provider as authorized agent known to the Water Services Authority and shall also be published in a newspaper or newspapers circulating in the area where the water scheme is situated, which notice shall be published in English and the predominant language of such newspaper where the predominant language is not English and the predominant language of the majority of people to be served by such water scheme.
- (2) The Water Services Authority shall give prior consideration to any proposals submitted by any public sector Water Services Provider as authorised agent as contemplated in section 19 (2) of the Act before considering any proposals submitted by any private sector Water Services Provider as authorised agent.
- (3) The Water Services Authority shall, in respect of every water scheme for which it intends to approve a Water Services Provider as authorised agent-

- (a) prepare a full and detailed description of the water scheme or scheme which will be operated by the Water Services Provider as authorised agent and which shall provide that the Water Services Authority complies with the criteria set in section 11 of the Act, this By-law and the water development plan adopted by the Water Services Authority in terms of section 15 of the Act, which description shall include, but not be limited to-
 - (i) the name or names of the water scheme or scheme,
 - (ii) an indication of the nature of the water services to be provided by the Water Services Provider as authorised agent;
 - (iii) detailed plans or drawings, with co-ordinates and scales, and specifications depicting the physical installation associated with the water scheme or scheme, including all the structures, aqueducts, pipes, valves, pumps, meters or other apparatus relating thereto used or intended to be used by it in connection with the provision of water services contemplated in the proposal;
 - (iv) a detailed description, including numbers and locality, of the clients or potential clients that will be supplied with water by the Water Services Provider as authorised agent;
 - (v) details of the source, the quality and quantity of water that will be supplied to clients or potential clients and what arrangements are in place to ensure that such quality and quantity is consistently maintained; and
 - (vi) a certificate indicating who the legal owner or owners of the water scheme or schemes is or are; and
 - (vii) certified copies of all documents and deeds reflecting the legal status of the water scheme or schemes, including deeds of servitudes where appropriate;
- a. make such information available to all persons or institutions who wish to submit a proposal in response to the public notice published in terms of section 5 (1) above of this By-law.
 - (viii) Any proposal submitted in response to the public notice contemplated herein shall include the following-
 - a. A certified copy of the identity document of the applicant, or a certified copy of the founding document or constitution of the applicant, if the applicant is a legal person;
 - b. a certified resolution adopted by the management body of the applicant, if the applicant is a legal person, resolving to apply for approval as a Water Services Provider as authorised agent;
 - c. a certified list of the names and addresses of all persons occupying a leadership and decision-making power in the applicant;
 - d. a detailed statement, supported by adequate proof of authenticity, setting out the applicants qualifications, capacity to undertake the work associated with the provision of water services in the circumstances reflected in the application, and the experience, skills and financial resources available to it to undertake the provision of water services to be provided by the applicant;
 - e. a business plan setting out how the water scheme or water schemes will be operated and maintained during the period the Water Services Provider as authorised agent will undertake the supply of water services as contemplated in the proposal, and what arrangements have been adopted to deal with any emergency, including natural disasters

and drought;

- f. a budget describing the financial administration of the water scheme or water schemes, the source of any capital or revenue requirements, and an indication of the sustainability of the water scheme or water schemes;
- g. details of tariffs and charges that the applicant will levy on all clients and potential clients, the method of calculations such tariffs and charges, the process whereby increases or decreases in such tariffs and charges will be dealt with and the manner in which such tariffs and charges comply with the national norm set by the Minister of Water Affairs and Forestry in terms of section 10 of the Act; and
- h. full details of the conditions that will be imposed in terms of section 4 of the Act and full details required in terms of section 19 (4) of the Act.

6. Application for approval.

- (1) Any person or institution seeking approval from the Water Services Authority in terms of sections 6 (1) or 22 (1) of the Act under circumstances other than in response to a notice published in terms of section 5 (1), or the renewal of an existing approval, shall do so in accordance with the provisions of this By-law and at its own expense.
 - (a) No application for approval in terms of section 6 (1) of the Act shall be granted in respect of any water scheme where the clients or potential clients exceed fifty (50) persons or where the population density exceeds one person per hectare.
 - (b) Any application for an approval in terms of section 30 (2) (d) of the Act shall be made under the provisions of section 22 (1) of the Act.

An application for such approval, or the renewal of such approval, shall be made to the Water Services Authority in writing.

- (2) Immediately on receipt of an application made in terms of section 22 (1) of the Act, if the applicant is a private sector Water Services Provider as authorised agent the Water Services Authority shall, in terms of section 19 of the Act, notify all public sector water providers known to it and-
 - (a) request such public sector water services providers to notify the Water Service Authority within a period of 30 days from the date of the receipt by the public sector water provider of such notice whether it is willing and able to perform the functions contained in the application, and if it is, to provide the Water Services Authority with the documents and particulars referred to in sections 5 and 6, and
 - (b) on receipt of such documentation and particulars, the Water Services Authority shall consider such application and decide whether to approve a public sector Water Services Provider or a private sector Water Services Provider as authorised agent in respect of the water scheme concerned.
- (3) Any application for approval in terms of sections 5 and 6, or the renewal of any approval granted by the Water Services Authority, shall be accompanied by, at least, the following documents or particulars, provided that, in the case of a renewal of an approval, the Water Services Authority may, at its discretion, dispense with some of the documents or particulars to avoid unnecessary duplication-
 - (a) a certified copy of the identity document of the applicant, if a natural person, or a certified copy of the founding document or constitution of the applicant, if the applicant is a legal person;

- (b) a certified resolution adopted by the management body of the applicant, if the applicant is a legal person, resolving to apply for approval as a Water Services Provider as authorised agent;
- (c) a certified list of the names and addresses of all persons occupying a leadership and decision-making power in the applicant;
- (d) a detailed statement, supported by adequate proof of authenticity, setting out the applicants qualifications, capacity to undertake the work associated with the provision of water services in the circumstances reflected in the application, and the experience, skills and financial resources available to it to undertake the provision of water services to be provided by the applicant;
- (e) a full and detailed description of the water scheme or schemes which will be operated by the applicant containing sufficient information to enable the Water Supply Authority to determine whether the water scheme or schemes complies with the criteria set in section 11 of the Act, this By-law and the water development plan adopted by the Water Services Authority in terms of section 15 of the Act, which description shall include, but not be limited to-
 - (i) the name or names of the water scheme or schemes;
 - (ii) indication of the nature of the water services to be provided by the applicant;
 - (iii) detailed plans or drawings, with co-ordinates and scales, and specifications depicting the physical installation associated with the water scheme or schemes, including all the structures, aqueducts, pipes, valves, pumps, meters or other apparatus relating thereto used or intended to be used by it in connection with the provision of water services contemplated in the application;
 - (iv) a detailed description, including numbers and locality, of the clients or potential clients that will be supplied with water by the applicant;
 - (v) details of source, the quality and quantity of water that will be supplied to clients or potential clients and what arrangements are in place to ensure that such quality and quantity is consistently maintained;
 - (vi) a business plan setting out how the water scheme or water schemes will be operated and maintained during the period the applicant undertakes the supply of water services as contemplated in the application, and what arrangements have been adopted to deal with any emergency, including natural disasters and drought;
 - (vii) a budget describing the financial administration of the water scheme or water schemes, the source of any capital or revenue requirements, and an indication of the sustainability of the water scheme or water schemes; and
 - (viii) details of tariffs and charges that the applicant will levy on all clients and potential clients, the method of calculating such tariffs and charges, the process whereby increases or decreases in such tariffs and charges will be dealt with, and the manner in which such tariffs and charges comply with the national norm set by the Minister of Water Affairs and Forestry in terms of section 10 of the Act.
 - (ix) a certificate indicating who the legal owner or owners of the water scheme or schemes is or are;
 - (x) certified copies of all documents and deeds reflecting the legal status of the water scheme or schemes, including deeds of servitude where appropriate; and full details of the conditions that will be imposed in terms of section 4 of the Act and full details required in terms of section 19 (4) of the Act.

7. Additional information to make decision.

- (1) The Water Services Authority may call for any additional information or documents reasonably required to enable it to determine whether the proposer or applicant, including a public sector water provider, or the water scheme or schemes will comply with the Act, this By-law and the water development plan of the Water Services Authority, and whether the obligations of the Water Services Authority, imposed on it by the Act, will be met.
- (2) The Water Services Authority may, and it shall, if it initially decides to refuse to accept a proposal made as contemplated in sections 5 and 6, or if it, initially decides to refuse an application made in terms of sections 5 and 6, including an application made by a public sector water provider, prior to making a final decision, meet with the proposer or applicant, as the case may be, and any organization reasonably representative of the clients or potential clients of the water scheme or schemes, in order to hear representations made by the applicant and such representative organizations in support of, or against, the applications, and it shall take such representations into account in arriving at its final decision.

8. Procedure on approval.

- (1) In the event of the Water Services Authority granting such approval it shall,
 - (a) in the case of an application for approval in terms of section 7 (1) of the Act, issue a letter of approval to the applicant containing such conditions as the Water Services Authority may deem appropriate, which conditions shall be binding on the applicant, and which may contain an obligation to comply with any provision of the By-laws as though such person or institution was an approved Water Services Provider as authorised agent;
 - (b) In the case of an application for approval in terms of section 22 (1) of the Act-
 - (i) if the applicant is a private sector Water Services Provider as authorised agent, cause a notice to be published in a newspaper or newspapers circulating in the area where the water scheme to which the application relates is situated, publicly disclosing its intention to approve such application; and
 - (ii) enter into a contract with the applicant, as contemplated in section 19 (1) (b) (i) of the Act, provided that, in the case of a private sector Water Services Provider as authorised agent, such contract shall not commence until a period of thirty days has elapsed after the date of publication of the notice contemplated in section 19 (1) (b) (i) of the Act and after the Water Services Authority has taken into account any representations made by any person or institution in response to the said notice; and
 - (iii) enter into a joint venture agreement with the Water Services Provider as authorised agent as contemplated in section 19 (1) (b) (ii) of the Act upon such terms and conditions as may be negotiated by such parties, provided that, in the case of a private sector water services provider, such agreement shall not commence until a period of thirty days has elapsed after the Water Services Authority has taken into account any representations made by any person or institution in response to the said

notice.

- (2) Any notice contemplated in section (1) (b) (i) of the Act shall be published in a newspaper or newspapers, and in the predominant language of such newspaper, which is or are most likely to be read by a majority of the clients or potential clients of the water scheme and by the public generally in the area of jurisdiction of the Water Services Authority.
- (3) The By-laws in this section shall apply in all cases where the Water Services Authority has granted its approval to a person or institution in terms of section 22 (1) of the Act read with the provisions of this By-law.
- (4) The Water Services Authority shall designate each water scheme in its area of jurisdiction into one or other category defined in section 9 of this By-law.

(iv) **Water scheme categories.**

- (1) The categories of water scheme contemplated in section 5 and 6 shall be-
 - a. "Category A" being a range of water schemes from either elementary or rudimentary water schemes providing water supply services by drawing water from a hand pump or protected spring, or the provision of sanitation services to a rural community, to more advanced water schemes providing water supply services by way of an abstraction system which is more sophisticated, which has a metered connection to a bulk main and the capacity to supply both communal stand-pipes and private connection provision, or sanitation services to a rural or semi-urban community;
 - b. "Category B" being a range of water schemes from either water schemes where the abstraction and reticulation provides water to be laid out or clearly identified sites, or sanitation services, to small towns, including un-proclaimed towns, to water schemes providing water supply services or sanitation services to a township proclaimed or approved under any law relating to the establishment of townships or water supply services for industrial use, or for the disposal of industrial effluent.
- (2) The Water Services Authority may from time to time in appropriate circumstances change the category to which any water scheme has been allocated to.

A Water Services Authority shall give written notice to the appropriate approved Water Services Provider as authorised agent of its intention to change the category to which any water scheme is allocated to such water services of its intention to change the category to which any water scheme is allocated to such Water Services Provider as authorised agent, and the change in allocation shall take effect from the date upon which such notice is delivered to the relevant Water Services Provider as authorised agent.

- (3) The decision of the Water Services Authority to allocate a category to a water scheme shall be final, provided that any person or institution which has an interest in a particular water scheme who is aggrieved by such allocation on the grounds that he or she is materially prejudiced by such allocation, shall be entitled to appeal to the council of the Water Services Authority against such allocation in accordance with the following provisions-
 - (a) an appeal shall be noted in writing delivered to a recognized main office of the Water Services Authority or by pre-paid post addressed to the recognized postal address of the Water Services Authority;
 - (b) the document evidencing the appeal shall state the grounds upon which the appellant considers that he or she is prejudiced by the allocation appealed against;

- (c) the appeal shall be considered and disposed of by the Council within 45 days of the receipt by it of the document evidencing the appeal;
 - (d) The decision of the Council shall be final, but does not preclude the appellant from approaching and utilizing the Courts of Law.
- (4) Subject to the provisions of this By-Law, the Water Services Authority may, at its discretion, in respect of any water scheme falling into Category "A", suspend any by-laws.
- (5) Any such suspension shall be reviewed at each Council sitting thereafter with a full motivated submission placed before the full Council as to why the suspension should remain in place. No by-law shall be suspended if the consequences of such suspension shall constitute a contravention of the Act.

(v) **Water services provider categories.**

- (1) Every approved Water Services Provider as authorised agent shall be designated as a Category 1 or a Category 2 provider in accordance with the following criteria-
- a. a Category 1 provider shall be a person or institution which, in the opinion of the Water Services Authority, has the capacity, without external assistance, to manage and administer the water scheme in respect of which approval has been granted in terms of section 22 (1) of the Act and to maintain and operate the water scheme efficiently and effectively.
 - b. a Category 2 provider shall be a person or institution which, in the opinion of the Water Services Authority, does not have the capacity, without external assistance, to manage and administer the water scheme in respect of which approval has been granted in terms of section 22 (1) of the Act and maintain and operate the water scheme efficiently and effectively.
- (2) The decision of the Water Services Authority to allocate a category to an approved Water Services Provider as authorised agent shall be final, provided that any person or institution which has an interest in a particular provider who is aggrieved by such allocation on the grounds that he or she is materially prejudiced by such allocation, shall be entitled to appeal to the Council of the Water Services Authority against such allocation in accordance with the following provisions-
- (a) an appeal shall be noted in writing delivered to a recognized main office of the Water Services Authority or by pre-paid post addressed to the recognized postal address of the Water Services Authority;
 - (b) the document evidencing the appeal shall state the grounds upon which the appellant considers that he or she is prejudiced by the allocation appealed against;
 - (c) the appeal shall be considered and disposed of by the Council within 45 days of the receipt by it of the document evidencing the appeal;
 - (d) the decision of the council shall be final.
- (3) The Water Services Authority may, in its discretion, require a Category 2 Water Services Provider, as a condition of approval in terms of section 22 (1) of the Act, to enter into a contract with a support services agent who shall in the opinion of the Water Services Authority, have the capacity to provide resources and assistance to the Water Services Provider as authorised agent.

- (4) Water Services Provider as authorised agent to comply with the provisions of the Act, this By-law and any contract or joint venture agreement contemplated in section 19 (1) (b) (i) or (ii) of the Act.
- (5) A certified copy of the agreement referred to in section 8 above of this By-law shall be lodged with the Water Services Authority and such copy shall at all times reflect the true agreement between the parties to it.
- (6) Any contract entered into in terms of section 8 above of this by-law shall be approved by the Water Services Authority and may not be amended by the Water Services Provider as authorised agent and the support services agent without the prior written consent of the Water Services Authority.

(vi) **Monthly report.**

- (1) An approved Water Services Provider as authorised agent shall submit a monthly report to the Water Services Authority providing at least the following information-
 - a. such information as the Water Services Authority may reasonably require in order to enable it to monitor and evaluate the operation of the water scheme concerned and to satisfy itself that the said scheme is being operated in such a manner so as to fulfil the requirements of the Act, the applicable water development plan, this By-law and the contract or joint venture contemplated in section 19 (1) (b) (i) or
 - b. (ii) of the Act; Failure to submit the said report shall constitute grounds upon which the Water Services Authority shall be entitled to review the approval granted by it in terms of section 22 (1) of the Act to the Water Services Provider as authorised concerned;
 - c. Such information pertaining to the quality of water so that the Water Services Authority may monitor and evaluate to such quality of water being delivered to the community within the area of jurisdiction of the Water Services Provider as authorised agent.

(vii) **Quarterly report.**

- (1) An approved Water Services Provider as authorised agent shall submit a quarterly report to the Water Services Authority providing the following information-
 - a. the names and addresses of all clients;
 - b. the quantity of water consumed by each client;
 - c. the record of payments made by each client;
 - d. arrears owing by clients to the approved Water Services Provider as authorised agent and the steps being taken to recover such arrears;
 - e. arrears written off as irrecoverable and reasons why they are deemed to be irrecoverable; and
 - f. circumstances where water services are limited or discontinued and the reasons why such services are so limited or discontinued.
- (2) Failure to submit the said report shall constitute grounds upon which the Water Services Authority shall be entitled to review the approval granted by it in terms of section 22 (1) of the Act to the Water Services Provider as authorised agent concerned.

(viii) **Disputes.**

Any dispute or conflict arising between the Water Services Authority and an approved Water Services Provider as authorised agent shall be resolved by mediation and arbitration and every agreement made and entered into under the provisions of this By-law shall contain appropriate provisions to that effect.

CHAPTER 3 SERVICE LEVELS

(ix) **Service levels.**

- (1) The Municipality may in accordance with national policy, but subject to principles of sustainability and affordability determine the service levels it is able to provide to consumers and must make these known by public notice.
- (2) The Municipality may, in determining service levels, differentiate between types of consumers, geographical areas and socio-economic areas.
- (3) The following levels of service may, subject to subsection (1), be provided by the Municipality-
 - (a) Communal water supply services and on-site sanitation services-
 - (i) constituting the minimum level of service provided by the Municipality;
 - (ii) consisting of reticulated standpipes or a stationery water tank serviced either through a network pipe or a water tanker located within a reasonable walking distance from any household with a Ventilated Improved Pit latrine located on each premises, with premises meaning the lowest order of visibly demarcated area on which some sort of informal dwelling has been erected;
 - (iii) installed free of charge;
 - (iv) provided free of any charge to consumers;
 - (v) where communal water use is measured and recorded and
 - (vi) maintained by the Municipality;
 - (b) a yard connection not connected to any water installation and an individual connection to the Municipality's sanitation system-
 - (i) consisting of an un-metered standpipe on a premises not connected to any water installation and a pour-flush toilet pan, wash-trough and suitable toilet top structure connected to the Municipality's sanitation system;
 - (ii) installed free of charge;
 - (iii) provided free of any charge to consumers; and
 - (iv) maintained by the Municipality; and
 - (v) a metered pressured water connection with an individual connection to the Municipality's sanitation system - installed against payment of the relevant connection charges;
 - (vi) provided against payment of the prescribed tariff; and
 - (vii) with the water and drainage installations maintained by the consumer.

CHAPTER 4 CONDITIONS FOR WATER SUPPLY SERVICES

Part 1 Connection to water supply systems

(x) Application for water service.

- (1) Application for water services is to be made in terms of section 5 of the Customer Care and Revenue Management By-laws.
- (2) Where premises or a consumer are provided with a water service, it is deemed that a services agreement contemplated in section 5 (3) of the Customer Care and Revenue Management By-laws exists.
- (3) The Municipality must, on application as contemplated in subsection (1), inform the applicant of the different levels of services contemplated in section 14 (3) and the tariffs or charges associated with each level of services, and the applicant must elect the level of services to be provided to him or her or it.
- (4) A consumer may at any time apply that the level of services elected in terms of the agreement entered into be altered, provided that-
 - (a) such services are available; and
 - (b) any costs and expenditure associated with altering the level of services are payable by the consumer.
- (5) When a person applies in terms of section 5 of the Customer Care and Revenue Management By-laws, the Municipality must ensure, through a process of interaction with the applicant, that the applicant understands the contents of the application form.
- (6) In the instance where an illiterate or similarly disadvantaged person applies, the Municipality must take additional steps to ensure that the applicant understands such contents.

(xi) Special agreements for water services.

The Municipality may enter into a special agreement with an applicant for the provision of water services to-

- a. an applicant inside its area of jurisdiction, if the services applied for necessitates the imposition of conditions not contained in the form contemplated in section 5 (1) of the Customer Care and Revenue Management By-laws; and
- b. an applicant outside its area of jurisdiction, if such application has been approved by the Water Services Authority having jurisdiction or supplying water services in the area in which the water is sourced.

(xii) Change in purpose for which water services are used.

Where the purpose for or extent to which water services used is changed from that provided for in the agreement, the responsibility is on the consumer to advise the Municipality of such change, and the consumer must then enter into a new agreement with the Municipality.

(xiii) Provision of connection pipe.

- (1) If a services agreement for water supply services in respect of premises has been concluded and no connection pipe exists in respect of the premises, the owner must apply on the prescribed form, and pay the prescribed tariff for the installation of such

a pipe.

- (2) If an application is made for a water supply service which is of such an extent or so situated that it is necessary to extend, modify or upgrade the water supply system in order to supply water to the premises, the Municipality may agree to the extension subject to such conditions as it may impose.
- (3) Only the Municipality may install a connection pipe, but the owner or consumer may connect the water installation to the connection pipe.
- (4) A person may not commence any development on any premises unless the Municipality has installed a connection pipe and meter.

(xiv) **Location of connection pipe.**

- (1) A connection pipe provided and installed by the Municipality must-
 - a. be located in a position agreed to between the owner and the Municipality and be of the size determined by the Municipality;
 - b. terminate at-
 - i. the boundary of the land owned by or vested in the Municipality, or over which the Municipality has a servitude or other right;
 - ii. the outlet of the water meter if it is situated on the premises; or
 - iii. the isolating valve if it is situated on the premises.
- (2) In reaching agreement with an owner concerning the location of a connection pipe, the Municipality must ensure that the owner is aware of-
 - (a) practical restrictions that may exist regarding the location of a connection pipe;
 - (b) the cost implications of the various possible locations of the connection pipe; and
 - (c) whether or not the Municipality requires the owner to indicate the location of the connection pipe by providing a portion of his or her water installation at or outside the boundary of his or her premises, or such agreed position inside or outside his or her premises where the connection is required, for the Municipality to connect to such installation.
- (3) The Municipality may on application by any person agree, subject to such conditions as it may impose, to a connection to a main other than that which is most readily available for the provision of water supply to the premises, but the applicant is responsible for any extension of the water installation to the connection point designated by the Municipality and for obtaining at his or her cost, such servitudes over other premises as may be necessary.
- (4) An owner must pay the prescribed connection charge in advance before a water connection can be effected.

(xv) **Provision of single water connection for supply to several consumers on same premises.**

- (1) Despite section 18, only one connection pipe to the water supply system may be provided for the supply of water to any premises, irrespective of the number of accommodation units, business units or consumers located on such premises.

- (2) Where the owner, or the person having the charge or management of any premises on which several accommodation units are situated, requires the supply of water to such premises for the purpose of supply to the different accommodation units, the Municipality may provide and install either-
 - (a) a single measuring device in respect of the premises as a whole or any number of such accommodation units; or
 - (b) a separate measuring device for each accommodation unit or any number thereof.

- (3) Where the Municipality has installed a single measuring device as contemplated in subsection (2) the owner or the person having the charge or management of the premises, as the case may be-
 - (a) must, if the Municipality so requires, install and maintain on each branch pipe extending from the connection pipe to the different accommodation units-
 - (i) a separate measuring device; and
 - (ii) an isolating valve; and
 - (b) is liable to the Municipality for the tariffs and charge for all water supplied to the premises through such a single measuring device, irrespective of the different quantities consumed by the different consumers served by such measuring device.

- (4) Despite subsection (1), the Municipality may authorise that more than one connection pipe be provided on the water supply system for the supply of water to any premises-
 - (a) comprising sectional title units; or
 - (b) if undue hardship or inconvenience would be caused to any consumer on such premises by the provision of only one connection pipe.

- (5) Where the provision of more than one connection pipe is authorized by the Municipality under subsection (4), the tariffs and charges for the provision of a connection pipe is payable in respect of each water connection so provided.

- (6) Where the premises is supplied by a number of connection pipes, the Municipality may require the owner to reduce the number of connection points and alter his or her water installation accordingly.

(xvi) **Interconnection between premises or water installations.**

- (1) An owner of a premises must ensure, subject to subsection (2), that no interconnection exists between-
 - a. the water installation on his or her premises and the water installation on other premises; or
 - b. where several accommodation units are situated on the same premises, between the water installations of the accommodation units.

- (2) Interconnection may exist only if he or she-
 - (a) has obtained the prior written consent of the Municipality; and

(b) complies with any conditions that it may have imposed.

(xvii) **Disconnection of water installation from connection pipe.**

The Municipality may disconnect a water installation from the connection pipe and remove the connection pipe if-

- a. the agreement for supply has been terminated and it has not received an application for a subsequent supply of water to the premises served by the pipe within a period of 90 days of such termination; or
- b. the building on the premises concerned has been demolished.

(xviii) **Communal water services works and provision of water services work for water supply to several consumers.**

The Municipality may install a communal water services work for the provision of water services to several consumers at a location that the Municipality deems appropriate, provided that the consumers to whom water services will be provided by that water services work have been consulted in respect of-

- a. the level of service;
- b. the tariff that will be payable; and
- c. the location of the work.

(xix) **Temporary supply from water supply system.**

- (1) The Municipality may authorise a temporary supply of water to be taken from one or more water supply systems specified by it, subject to such conditions and period as it may prescribe.
- (2) A person who desires a temporary supply of water referred to in subsection (1) or the use of a portable water meter in terms of subsection (4) or both, a supply and a meter, must apply to the Municipality for such service.
- (3) Supply of water in terms of subsection (1) must be measured.
- (4) The Municipality may for purposes of measuring provide a portable water meter to be returned to the Municipality on termination of the temporary supply, and the portable meter and all other fittings and apparatus used for the connection of the portable water meter to the system-
 - (a) remain the property of the Municipality; and
 - (b) may be provided subject to any conditions imposed by the Municipality.

Part 2
Standards and conditions of supply

(xx) **Quantity, quality and pressure.**

Water supply services provided by the Municipality must comply with the minimum standards set for the provision of water supply services as required in terms of regulations 3, 5 and 15 of Regulation 22355 promulgated in terms of the Act on 8 June 2001.

(xxi) **General conditions of supply.**

- (1) The Municipality may specify the maximum pressure to which water will be supplied from the water supply system but where a consumer requires water to be supplied at a greater pressure and this is technically feasible the consumer will be responsible for the costs.
- (2) The Municipality may, in an emergency, interrupt the supply of water to any premises without prior notice.
- (3) If the consumption of water by a consumer adversely affects the supply of water to another consumer, the Municipality-
 - (a) may apply restrictions to the supply of water to the first mentioned consumer in order to ensure a reasonable supply of water to the other consumer; and
 - (b) must in writing inform the first mentioned consumer of the restrictions.

(xxii) **Testing of pressure in water supply system.**

The Municipality may, on application by an owner and on payment of the determined charge, determine and furnish the owner with the value of the pressure in the water supply system relating to his or her premises over such period as he or she may request.

The granting of a supply of water by the Municipality does not constitute an undertaking by it to maintain at any time or at any point in its water supply system—

- (a) an uninterrupted supply;
- (b) a specific pressure or rate of flow in such supply; or
- (c) a specific standard of quality of such water.

(xxiii) **Pollution of Municipality's water supply.**

- (1) A person may not, unless the person is specifically authorized to do so in writing by the Municipality on application and if the water is used by it in connection with the water supply, in any manner pollute-
 - a. water in a reservoir or other place-
 - i. which is either in whole or in part vested in the Municipality; or
 - ii. which the Municipality owns or controls, either in whole or in part; and
 - b. water or the environment in the jurisdiction of the Municipality, including but not restricted to all water sources such as streams, rivers, and dams.
 - c. A person may not deposit or discharge rubbish, night-soil, industrial waste or other matter which may cause pollution of any nature on a portion of a catchment area, which has been designated by notice boards as an area where such acts are prohibited, relating to the Municipality's water supply.
 - d. A person may deposit or discharge rubbish, night-soil, industrial waste or other matter only at places designated by notice boards or in receptacles as are provided by the Municipality.
- (2) If a person contravenes subsection (1) or (2) (a), the Municipality may-

- (a) by written notice require the person immediately to stop the prohibited act and to take specified action within the specified period; or
- (b) if the situation is a matter of urgency, without prior notice take such action as may be necessary and recover the cost from the person.

(xxiv) **Owner to prevent pollution of water.**

- (1) An owner must provide and maintain approved measures to prevent the entry of a substance which may be a danger to health or adversely affect the possibility of water or affect its fitness for use into-
 - a. the water supply system; and
 - b. any part of the water installation on his or her premises,
- (2) If an owner fails to comply with subsection (1) and pollution occurs, the Municipality may serve a notice contemplated in section 131 on the owner.

(xxv) **Water restrictions.**

- (1) The Municipality may-
 - a. for the purposes of water conservation;
 - b. where drought conditions prevail or are imminent;
 - c. to prevent the wasteful use of water, or;
 - d. in the event of a water shortage, drought or flood, by public notice-
 - i. prohibit or restrict the consumption of water in the whole or part of its area of jurisdiction in general or for-
 - (aa) specified purposes;
 - (bb) during specified hours of the day or on specified days; or in a specified manner;
 - ii. determine and impose-
 - (aa) a limit on the quantity of water that may be consumed over a specified period;
 - (bb) charges additional to those the prescribed tariff in respect of the supply of water in excess of a limit contemplated in item (aa); or
 - (cc) a general surcharge on the prescribed tariff in respect of the supply of water; or
 - iii. impose restrictions or prohibitions on-
 - (aa) the use or manner of use or disposition of an appliance by means of which water is used or consumed; or
 - (bb) the connection of such appliances to the water installation.
- (2) A public notice contemplated in subsection (1) must, except in the event of a flood or other disaster necessitating the immediate restriction or prohibition of the consumption of water, set out the date and time when such restrictions become effective, being not less than three days after the date of publication of the public notice.

- (3) The Municipality may-
 - (a) limit the application of the provisions of a public notice contemplated by subsection (1) to specified areas and categories of consumers, premises and activities; or
 - (b) permit deviations and exemptions from, and the relaxation of, any of the provisions on reasonable grounds.
- (4) The Municipality may-
 - (a) take measures, or by written notice require a consumer at his or her own expense to take measures, including the installation of measurement devices and devices for restricting the flow of water, as may be necessary to ensure compliance with a public notice published contemplated in subsection (1); or
 - (b) for such period as it may deem fit, limit the supply of water to any premises in the event of-
 - (i) a contravention of the public notice on such premises; or failure to comply with the terms of a public notice contemplated in of subsection (1), and where the supply has been limited, it shall only be restored when the prescribed tariff for reconnecting the supply has been paid.
- (5) The provisions of this section also apply in respect of water supplied directly by the Municipality to consumers outside its area of jurisdiction, despite anything to the contrary in the conditions governing such supply, unless otherwise specified in the public notice contemplated in subsection (1).

(xxvi) **Specific conditions of supply.**

- (1) Despite section 25, the granting of a supply of water by the Municipality does not constitute an undertaking by it to maintain at all times or at all points in its water supply system-
 - a. an uninterrupted supply, subject to the provisions of regulations 4 and 14 of Regulation 22355 promulgated in terms of the Act on 8 June 2003; or
 - b. a specific pressure or rate of flow in such supply other than required in terms of regulation 15 (2) of Regulation 22355 promulgated in terms of the Act on 8 June 2001.
- (2) The Municipality may, subject to the provisions of subsection (1) (b), specify the maximum pressure to which water will be supplied from the water supply system.
- (3) If an owner requires-
 - (a) that any of the standards referred to in subsection (1); or
 - (b) a higher standard of service than specified in section 25,

be maintained on his or her premises, he or she must take the necessary steps to ensure that his or her water installation is able to meet such standards.
- (4) The Municipality may, in an emergency, interrupt the supply of water to any premises without prior notice.
- (5) The Municipality is not liable for any damage to property caused by water flowing from any water installation left open when the water supply is re-instated, following an interruption in supply.

- (6) Every steam boiler, hospital, industry and any premises which requires, for the purpose of the work undertaken on the premises, a continuous supply of water must have a storage tank where water can be stored when the continuous supply is disrupted, and the storage tank-
 - (a) must comply with the specification for water storage tanks as stipulated in SABS 0252 Part 1; and
 - (b) must have a capacity of not less than 24-hours water supply calculated as the quantity required to provide the average daily consumption.

Part 3 Measurement

(xxvii) Measuring of quantity of water supplied.

- (1) The Municipality may install at any point on the service pipe on the premises a measuring device, and its associated apparatus.
- (2) If the Municipality installs a measuring device on a service pipe in terms of subsection (4), it may install a section of pipe and associated fittings between the end of its connection pipe and the meter, and such section is deemed to form part of the water supply system.
- (3) If the Municipality installs a measuring device together with its associated apparatus on a service pipe in terms of subsection (4), the owner-
 - (a) must provide a suitable place in which to install it;
 - (b) must ensure that unrestricted access is available at all times;
 - (c) is responsible for its protection and is liable for the costs arising from damage thereto, excluding damage arising from normal wear and tear;
 - (d) must ensure that no connection is made to the pipe in which the measuring device is installed, between the measuring device and the connection pipe serving the installation;
 - (e) must provide for the drainage of water which may be discharged, from the pipe in which the measuring device is installed, in the course of work done by the Municipality on the measuring device; and
 - (f) may not use or permit to be used on any water installation, any fitting, machine or appliance which causes damage or is likely to cause damage to any meter.
- (4) A person other than the Municipality may not-
 - (a) disconnect a measuring device and its associated apparatus from the pipe in which they are installed;
 - (b) break a seal which the Municipality has placed on a meter; or in any other way interfere with a measuring device and its associated apparatus,
- (5) If the measuring device is a meter and its size is unsuitable by reason of the quantity of water supplied to premises, the Municipality may-
 - (a) install a meter of such size as is necessary; and
 - (b) recover from the owner of the premises concerned the prescribed tariff for the installation of the meter.

- (6) The Municipality may require that the owner, at his or her expense, install a measuring device to each dwelling unit on any premises, to determine the quantity of water supplied to each unit, but where fixed quantity water delivery systems are used, a single measuring device may be used to supply more than one unit.

(xxviii) **Quantity of water supplied to consumer.**

- (1) Where water supplied by the Municipality to any premises is in any way taken by the consumer without such water passing through any measuring device provided by the Municipality, the Municipality, for the purpose of rendering an account, may estimate, in accordance with subsection (3), the quantity of water supplied to the consumer during the period that water is so taken by the consumer.
- (2) For the purposes of subsection (2), an estimate of the quantity of water supplied to a consumer is based on, as the Municipality may decide-
 - (a) the average monthly consumption of water on the premises registered over three succeeding measuring periods after the date on which the irregularity referred to in subsection (2) was discovered and rectified; or
 - (b) the average monthly consumption of water on the premises during any three consecutive measuring periods during the 12 months' period before the date on which it was discovered that the water was taken in the manner mentioned in subsection (2).
- (3) Nothing in this By-law may be construed as imposing on the Municipality an obligation to cause any measuring device installed by the Municipality on any premises to be read at the end of every month or any other fixed period, and the Municipality may charge the consumer an average consumption during the interval between successive readings of the measuring device.
- (4) Until such time as a measuring device has been installed in respect of water supplied to a consumer, the estimated or shared consumption of that consumer must be based on the average consumption, during a specific period, of water supplied to the specific supply zone within which the consumer's premises is situated.
- (5) Where it is not reasonably possible or cost effective to measure water supplied to each consumer within a determined supply zone, the Municipality may determine a tariff or charge based on the estimated or shared consumption of water supplied to that supply zone.
- (6) The Municipality must, within seven days measure the quantity of water supplied to the consumer at a time or on a day other than that upon which it would normally be measured-
 - (a) on receipt of a written notice from the consumer; and
 - (b) subject to payment of the determined charge.

(xxix) **Special measurement.**

- (1) If the Municipality requires, for purposes other than charging for water consumed, to ascertain the quantity of water which is used in a part of a water installation, it may by written notice advise the owner concerned of its intention to install a

measuring device at such point in the water installation as it may specify.

- (2) The installation of a measuring device, its removal, and the restoration of the water installation after such removal must be carried out at the expense of the Municipality.
- (3) Section 32 (2) and (3) apply insofar as they may be applicable in respect of a measuring device installed in terms of subsection (1).

(xxx) Sampling of water.

- (1) The Municipality must determine times and must, at those times, at its cost, take samples of water in the water supply systems for domestic purposes and cause the samples to be tested for compliance with any national standards prescribed in terms of section 9 of the Act.
- (2) The Municipality may take samples of water obtained from a source, authorized in terms of section 6 or 7 of the Act, other than the water supply system for domestic purposes, and cause the samples to be tested for compliance with any national standards prescribed in terms of section 9 of the Act.
- (3) The person to whom approval was granted in terms of section 6 (1) or 7 (1) of the Act to use the water for potable water, must pay the relevant charge in the prescribed tariff for the taking and testing of the samples referred to in subsection (1).

(xxxii) Supply of non-potable water by Municipality.

- (1) The Municipality may on application, and subject to such terms and conditions as it may impose, agree to supply non-potable water to a consumer.
- (2) Any supply of water agreed to in terms of subsection (1) may not be used for domestic or any other purposes if it may give rise to a health risk.
- (3) No warranty, expressed or implied, applies to the purity of any non-potable water supplied by the Municipality or its suitability for the purpose for which the supply was granted.
- (4) The supply of non-potable water, both as to condition and use, is entirely at the risk of the consumer, who is liable for any consequential damage or loss arising to himself, herself or others, including the consequences of any bona fide fault without negligence of the Municipality or the malfunction of a treatment plant.

(xxxiii) Pipes in streets or public places.

No person may, for the purpose of conveying water derived from whatever source, lay or construct a pipe or associated component on, in or under a street, public place or other land owned by, vested in, or under the control of any the Municipality, except with the prior written permission of the Municipality and subject to such conditions as it may impose.

Part 4 Audit

(xxxiii) Water audit.

- (1) The Municipality may, in order to assist it in its duty under regulations 10, 11 and 13 of Regulation 22355 promulgated in terms of the Act on 8 June 2001, require a consumer,

within one month after the end of a financial year of the Municipality, to undertake an annual water audit at his or her or its own cost.

- (2) A copy of the audit must be available for inspection by officials from-
 - (a) the Department of Water Affairs and Forestry; and
 - (b) the Municipality.
- (3) The audit must contain details in respect of-
 - (a) the amount of water used during the financial year;
 - (b) the amount paid for water for the financial year;
 - (c) the amount of water recycled
 - (d) the amount of effluent discharges
 - (e) the number of people living on the stand or premises;
 - (f) the number of people permanently working on the stand or premises;
 - (g) the seasonal variation in demand according to monthly consumption figures;
 - (h) the water pollution monitoring methods;
 - (i) the plans to manage demand for water;
 - (j) estimates of consumption by various components or uses, and a comparison of the above factors with those reported in each of the previous three years, where available;
 - (k) the current initiatives to manage demand for water; and
 - (l) a comparison of the above factors with those reported in each of the previous 3 years (where available).

Part 5 Installation work

(xxxiv) Approval of installation work.

- (1) If an owner wishes to have installation work done, he or she must first obtain the Municipality's written approval, but the approval is not required-
 - a. in the case of water installations in dwelling units or installations where no fire installation is required in terms of SABS Code 0400; or
 - b. for the repair or replacement of an existing pipe or water fitting other than a fixed water heater and its associated protective devices.
- (2) Application for the approval referred to in subsection (1) must be made on the prescribed form, and must be accompanied by-
 - (a) the prescribed tariff, if applicable;
 - (b) copies of the drawings as prescribed by the Municipality, giving information in the form required by Clause 4.1.1 of SABS Code 0252: Part I; and
 - (c) a certificate certifying that the installation has been designed in accordance

with SABS Code 0252: Part1 or has been designed on a rational basis.

- (3) The provisions of subsections (1) and (2) do not apply to a plumber who replaces a fixed water heater or its associated protective devices.
- (4) Approval given in terms of subsection (1) lapses at the expiry of a period of 24 months after the first day of the month succeeding the month in which the approval is given.
- (5) Where approval was required in terms of subsection (1), a complete set of approved drawings of installation work must be available at the site of the work at all times until such work has been completed.
- (6) If installation work has been done in contravention of subsection (1) and (2), the Municipality may by written notice require the owner of the premises concerned to-
 - (a) rectify the contravention within a specified period;
 - (b) if work is in progress, to cease the work; or
 - (c) remove all such work which does not comply with this section.

(xxxv) Persons permitted to do installation and other work.

- (1) A person, except a plumber or a person working under a plumber may not-
 - a. do installation work other than the replacement or repair of an existing pipe or water fitting;
 - b. replace a fixed water heater or its associated protective devices;
 - c. inspect, disinfect and test a water installation, fire installation or storage tank;
 - d. service, repair or replace a back flow preventer; or
 - e. install, maintain or replace a meter provided by an owner in a water installation.
- (2) A person may not require or engage a person who is not a plumber to do the work referred to in subsection (1);
- (3) Despite subsection (1), the Municipality may on application in writing permit a person who is not a plumber to do installation work on his or her own behalf on premises owned and occupied solely by himself or herself and his or her immediate household, but such work must be inspected and approved by a plumber at the direction of the Municipality.

(xxxvi) Technical requirements for water installation.

Subject to regulation 14 of Regulation 22355 promulgated in terms of the Act on 8 June 2001, application for approval must be accompanied by a certificate and drawings in terms of SABS 0252, and all water installations must comply with SABS 0252 Part 1, and all fixed electrical storage water heaters must comply with SABS 0254.

(xxxvii) Provision and maintenance of water installations.

- (1) An owner must provide and maintain his or her water installation situated within the boundary of his or her premises at his or her own cost.

- (2) Before doing work in connection with the maintenance of a portion of his or her water installation which is situated outside the boundary of his premises, an owner must obtain the written permission of the Municipality or the owner of the land on which such portion is situated, as the case may be.
- (3) An owner must install an isolating valve-
 - (a) in the case of a meter installed outside the boundary, at a suitable point on a service pipe immediately inside the boundary of the property; and
 - (b) in the case of a meter installed on the premises, at a suitable point on his or her service pipe.
- (4) In accordance with regulation 12 of Regulation 22355 promulgated in terms of the Act on 8 June 2001, the Municipality must repair any major, visible or reported leak in its water services system within 48 hours of becoming aware thereof.

(xxxviii) Use of pipes and water fittings to be authorized.

- (1) A person may not, without the prior written authority of the Municipality, install or use a pipe or water fitting in a water installation within the Municipality's area of jurisdiction, unless it is included in the schedule of approved pipes and fittings contemplated in subsection (6) as compiled by the Municipality.
- (2) Application for the inclusion of a pipe or water fitting in the schedule referred to in subsection (1) must be made on the prescribed form, and be accompanied by the relevant charge set out in the prescribed tariff.
- (3) A pipe or water fitting may be included in the schedule referred to in subsection (1) if-
 - (a) it bears the standardisation mark of the South African Bureau of Standards in respect of the relevant SABS specification issued by the Bureau;
 - (b) it bears a certification mark issued by the SABS to certify that the pipe or water fitting complies with an SABS mark specification or a provisional specification issued by the SABS, provided that no certification marks shall be issued for a period exceeding two years; or
 - (c) it is deemed acceptable by the Municipality.
- (4) The Municipality may, in respect of any pipe or water fitting included in the schedule, impose such additional conditions as it may deem necessary in respect of the use or method of installation thereof. A pipe or water fitting must be removed from the schedule if it-
 - (a) no longer complies with the criteria upon which its inclusion was based; or
 - (b) is no longer suitable for the purpose for which its use was accepted.
- (5) The schedule of approved pipes and fittings must be available for inspection at the office of the Municipality at any time during working hours.
- (6) The Municipality may sell copies of the current schedule at the relevant charge set out in the prescribed tariff.

(xxxix) Labelling of terminal water fittings and appliances.

All terminal water fittings and appliances using or discharging water must be marked, or must have included within the packaging of each item-

- a. the range of pressure in kPa over which the water fitting or appliance is designed to operate; and
- b. the flow rates, in litres per minute, related to the design pressure range, and this information must be given for at least the water pressures of 20kPa, 100kPa, and 400 kPa.

(xi) **Water demand management.**

- (1) A shower head with a maximum flow rate of greater than 10 litres per minute may not be installed in any water installation where-
 - a. the dynamic water pressure is more than 200 kPa at a shower control valve;
 - b. for general residential and industrial use it should be...
 - c. for firefighting equipment it should not be more than 600 kPa,
 - d. the plumbing has been designed to balance the water pressures on the hot and cold water supplies to the shower control valve.
- (2) The maximum flow rate from any tap installed on a wash hand basin may not exceed six litres per minute.

Part 6

Communal water supply services

(xli) **Provision of water supply to several consumers.**

- (1) The Municipality may install a communal standpipe for the provision of water supply services to several consumers at a location it deems appropriate, provided that the consumers to whom water supply services will be provided by that communal standpipe have been consulted.
- (2) The Municipality may provide communal water supply services by a communal installation designed to provide a controlled volume of water to several consumers.

Part 7

Temporary water supply services from fire hydrant

(xlii) **Water supplied from fire hydrant.**

- (1) The Municipality may in writing authorise a temporary supply of water to be taken from one or more fire hydrants specified by it, subject to such conditions and period as may be stated by it in the authority, and payment of such applicable charges, including a deposit, as may be determined by it.
- (2) A person who desires a temporary supply of water referred to in subsection (1) must apply for such water supply services in terms of provisions of the Customer Care and Revenue Management By-laws of the Municipality.
- (3) The Municipality must provide a portable water meter and all other fittings and apparatus necessary for the temporary supply of water from a hydrant.
- (4) The portable meter and all other fittings and apparatus provided for the temporary supply of water from a hydrant remains the property of the Municipality on

termination of the temporary supply, and failure to return the portable meter and all other fittings and apparatus is an offence.

Part 8 Boreholes

(xliv) **Notification of boreholes.**

- (1) A person may not sink a borehole on premises situated in a dolomite area, and a person must, before he or she sinks a borehole, determine if the premises on which the borehole is to be sunk is situated within a dolomite area.
- (2) The Municipality may require the owner or occupier of any premises who intends to sink a borehole as contemplated in subsection (4) (b) to undertake an environmental impact assessment for such intended borehole before sinking the borehole.
- (3) Boreholes are subject to the requirements of the National Water Act, 1998 (Act 36 of 1998).
- (4) The Municipality may, by public notice, require-
 - (a) the owner of any premises within the area of jurisdiction of the Municipality upon which a borehole exists or, if the owner is not in occupation of such premises, the occupier thereof, to notify it on the form similar to the DWAF form DW805 of the existence of a borehole on such premises, and provide it with such information in respect thereof as it may require; and the owner or occupier of any premises who intends to sink a borehole on premises to notify it on a form similar to the DWAF form DW805 of such intention before work in connection therewith is commenced.
- (5) The Municipality may-
 - (a) by notice require an owner or occupier who has an existing borehole used for water services; or
 - (b) or by public notice require owners or occupiers who have existing boreholes used for water services,

to obtain approval from it for the use of a borehole for potable water supply services in accordance with sections 6, 7 and 22 of the Act.
- (6) The Municipality may, in the notices contemplated in subsection (5) (a) and (b)-
 - (a) impose conditions in respect of the use of a borehole for potable water services; and
 - (b) impose a fixed charge in respect of the use of a borehole.

Part 9

Fire services connections

(xlv) **Connection to be approved by Municipality.**

- (1) The Municipality may grant or refuse an application for the connection of a fire extinguishing installation to the Municipality's main.
- (2) No water may be supplied to any fire extinguishing installation until a certificate in terms of section 39 (2) (c) has been submitted to the Municipality and until the

installation complies with the requirements of this By-law and any other relevant by-laws of the Municipality.

- (3) The Municipality is entitled, if it has allowed a fire extinguishing installation to be connected to its main, either to require the installation to be disconnected from the main or itself to carry out the work of disconnecting it at the consumer's expense, if the fire extinguishing installation is-
 - (a) not being kept in proper working order;
 - (b) otherwise not being properly maintained; or
 - (c) is being used for a purpose other than firefighting.

(xiv) **Special provisions.**

The provisions of SABS 0252-1:1994 apply to the supply of water for fire-fighting purposes.

(xvi) **Dual and combined installations.**

All new buildings erected after this By-law commence, must comply with the following requirements in relation to the provision of fire extinguishing services-

- a. If boosting of the system is required, a dual pipe system must be used, one for fire extinguishing purposes and the other for general domestic purposes;
- b. combined installations are only permitted subject to paragraph (c) where no booster pumping connection is provided on the water installation, and in such case the Municipality must provide a fire hydrant, at the consumer's expenses within 90m of the property to provide a source of water for the fire tender to extinguish the fire;
- c. combined installations where a booster pumping connection is provided are only permitted when designs have been approved and certified by the Municipality; and
- d. all pipes and fittings-
 - i. must be capable of handling pressures in excess of 1 800 kPa, which could be expected when boosting takes place; and
 - ii. must maintain their integrity when exposed to fire conditions.

(xlvii) **Connection pipes for fire extinguishing services.**

- (1) The Municipality must provide at all premises where provision has been made for fire extinguishing services, a single connection pipe for both fire extinguishing services (excluding sprinkler systems) and potable water supply services.
- (2) At all premises where provision has been made for fire extinguishing services, the Municipality must provide and install at the cost of the owner a combination meter on the connection pipe.
- (3) A separate connection pipe must be laid and used for every fire sprinkler extinguishing system unless otherwise approved.
- (4) A connection pipe must be equipped with a measuring device that will not obstruct

the flow of water while operating under fire fighting conditions.

(xlviii) Valves and meters in connection pipes.

- a. Every connection pipe to a fire extinguishing installation must be fitted with valves and a measuring device which is supplied by the Municipality at the expense of the consumer;
- b. installed between the consumer's property and the main; and
- c. installed in such position as may be determined by the Municipality.

(xlix) Meters in fire extinguishing connection pipes.

If it appears to the Municipality that water has been drawn for purposes other than for the purpose of extinguishing a fire from a connection pipe which is used solely for fire extinguishing purposes, the Municipality is entitled to install a water meter in the pipe, and the owner of the premises is liable for all costs in so doing.

(l) Sprinkler extinguishing installations.

A consumer may install a sprinkler installation in direct communication with the main, but the Municipality is not regarded to guarantee any specified pressure at any time.

(li) Header tank or double supply from main.

- (1) The consumer must, unless the installation is provided with a duplicate supply from a separate main, install a header tank for its sprinkler installation at such elevation as will compensate for any failure or reduction of pressure in the Municipality's main.
- (2) The main pipe leading from such header tank to the sprinkler installation may be in direct communication with the main, provided that such main pipe must be equipped with a reflux valve which, if for any reason the pressure in the main fails or is reduced, will shut off the supply from the main.
- (3) Where a sprinkler installation is provided with a duplicate supply from a separate main, each supply pipe must be equipped with a reflux valve situated within the premises.

(lii) Sealing of private fire hydrants.

- (1) Except in the case of a combined system with a combination meter, all private hydrants and hose-reels must be sealed by the Municipality and the seals may not be broken by any person other than the Municipality, except
 - a. for the purposes of opening the hydrant in the case of fire; or
 - b. in the course of servicing and testing.
- (2) The consumer must give the Municipality at least 48 hours written notice prior to a fire extinguishing installation being serviced and tested.
- (3) The consumer must bear the cost of resealing such a hydrant and hose-reel except when such seals are broken by the Municipality's officers for testing purposes.
- (4) The consumer must pay for any water consumed by a fire installation or sprinkler

system at the relevant charges in the prescribed tariff.

CHAPTER 5
CONDITIONS FOR SANITATION SERVICES

Part 1
Connection to sanitation system

(liii) **Obligation to connect to sanitation system.**

- (1) Unless consent for the use of on-site sanitation services was obtained in accordance with section 64, a premises on which sewage is produced must be connected to the Municipality's sanitation system if-
 - a. a connecting sewer is available; or
 - b. it is reasonably possible or cost effective for the Municipality to install a connecting sewer.
- (2) The Municipality may, by serving a written notice, require the owner of premises which is not connected to the Municipality's sanitation system to connect to the sanitation system.
- (3) The owner of premises required to connect to the Municipality's sanitation system in accordance with subsection (2), must inform the Municipality in writing of the on-site sanitation services provided by the Municipality that will no longer be required as a result of the connection to the sanitation system, and the owner remains liable for any charges payable in respect of on-site sanitation services until the agreement for such services has been terminated in accordance with section 9 of the Customer Care and Revenue Management By-laws,.
- (4) If the owner fails to connect to the sanitation system in accordance with the notice contemplated in subsection (2) the Municipality may, despite any other actions it may take in terms of this By-law, impose penalties as determined by it.

(liv) **Standards for sanitation services.**

Sanitation services provided by the Municipality must comply with the minimum standards for basic sanitation services as required in terms of regulation 2 of Regulation 22355 promulgated in terms of the Act on 8 June 2001.

(lv) **Objectionable discharge to sewage disposal system.**

- (1) Subject to regulations 7 and 8 of Regulation 22355 promulgated in terms of the Act on 8 June 2001, a person may not discharge, or permit the discharge or entry into the sewage disposal system or sea outfalls discharge point or in any public water of any sewage or other substance which does not comply with the standards and criteria set out in section 59, and which-
 - a. contains any substance in such concentration as will produce or be likely to produce in the effluent for discharge at any sewage treatment plant or sea outfalls discharge point or in any public water, any offensive or otherwise undesirable taste, colour, odour, temperature or any foam;
 - b. may prejudice the re-use of treated sewage;
 - c. may adversely affect any of the processes whereby sewage is treated for re-use;

- d. may adversely affect any of the processes whereby sewage is treated to produce sludge for disposal;
 - e. contains any substance or thing of whatever nature which is not amenable to treatment to a satisfactory degree at a sewage treatment plant;
 - f. contains any substance or thing of whatever nature which causes or is likely to cause a breakdown or inhibition of the processes in use at a sewage treatment plant;
 - g. contains any substance or thing of whatever nature which is of such strength, or which is amendable to treatment only to a degree as will result in effluent from the sewage treatment plant or discharge from any sea outfalls not complying with standards prescribed under the National Water Act, 1998 (Act 36 of 1998);
 - h. may cause danger to the health or safety of any person;
 - i. may be injurious to the structure or materials of the sewage disposal system;
 - j. may prejudice the use of any ground used by the Municipality; or
 - k. may inhibit the unrestricted conveyance of sewage through the sewage disposal system.
- (2) A person may not cause or permit any storm water to enter the sewage disposal system.
- (3) Subject to regulation 6 of Regulation 22355 promulgated in terms of the Act on 8 June 2001, the Municipality may, by written notice, order the owner or occupier to conduct, at his or her cost, periodic expert inspections of the premises in order to identify precautionary measures which would ensure compliance with this By-law and to report such findings to an authorized agent.
- (4) If any person becomes aware of a contravention of any provision of subsection (1) or (2) he or she must within 12 hours, or earlier if possible, advise the Municipality of the details of the contravention and the reasons for it.

Part 2

On-site sanitation services and associated services

(lvi) **Application for infrastructure.**

- (1) If a services agreement for on-site sanitation and associated services has been concluded or if it is not reasonably possible or cost effective for the Municipality to install a connecting sewer or no infrastructure in connection therewith exists on the premises, the owner must immediately make application for on-site sanitation services on the prescribed form and-
- a. pay the prescribed charge for the installation of necessary infrastructure; or
 - b. with the approval by the Municipality, install the connection sewer or on-site sanitation services in accordance with the specifications of the Municipality
- (2) The Municipality may specify in the approval the type of on-site sanitation services to be installed.

(lvii) **Use of on-site sanitation services not connected to sanitation system.**

- (1) A person may not use or permit the use, for domestic, commercial or industrial purposes, of on-site sanitation services which are not connected to the Municipality's sanitation system, except with the consent of the Municipality first having been obtained, and in accordance with such conditions as it may impose.
- (2) A person desiring the consent referred to in subsection (1) must provide the Municipality with evidence that the sanitation facility is not likely to have a detrimental effect on health or the environment.
- (3) The Municipality may withdraw consent given in terms of subsection (1) if-
 - (a) a condition imposed in terms of subsection (1) is breached; or
 - (b) the sanitation facility has a detrimental impact on health or the environment.
- (4) The Municipality may undertake investigations to determine if a sanitation facility has a detrimental impact on health or the environment.

The person to whom consent was granted in terms of subsection (1) is liable for the costs associated with an investigation undertaken in terms of subsection (4) if the result of the investigation indicates that the sanitation facility has a detrimental impact on health or the environment.

(lviii) **Septic tanks and on-site sewage treatment plants.**

- (1) The Municipality may, on such conditions as it may specify, approve the disposal of sewage or other effluent by means of septic tanks or other on-site sewage treatment plants.
- (2) A septic tank or other on-site sewage treatment plant may not be situated nearer than three metres to any dwelling unit or to any boundary of the premises on which it is situated.
- (3) Effluent from a septic tank or other on-site sewage treatment plant must be disposed of by french drains approved under section 64.
- (4) A septic tank must be watertight, securely covered and provided with gas-tight means of access to its interior adequate to permit the inspection of the inlet and outlet pipes and adequate for the purpose of removing sludge.
- (5) A septic tank serving a dwelling unit must-
 - (a) have a capacity below the level of the invert of the outlet pipe of not less than 500 litres per bedroom, subject to a minimum capacity below such invert level of 2 500 litres;
 - (b) have an internal width of not less than one metre measured at right angles to the direction of the flow;
 - (c) have an internal depth between the cover and the bottom of the tank of not less than 1,7 m; and
 - (d) retain liquid to a depth of not less than 1,4 m.
- (6) The design of septic tanks serving premises other than a dwelling unit must, prior to construction, be approved and certified by the Municipality.

(lix) **French drains.**

- (1) The Municipality may approve the disposal of waste water or other effluent by means of french drains, soakage pits or other approved works on such conditions

as it may specify having regard to the quantity and the nature of the effluent and the nature of the soil as determined by the permeability test prescribed by the South African Bureau of Standards.

- (2) A french drain, soakage pit or other similar work may not-
 - (a) be situated closer than five metres to any dwelling unit or to any boundary of any premises on which it is situated;
 - (b) be in any position as will cause contamination of any borehole or other source of water which is or may be used for drinking purposes; or
 - (c) cause dampness in any building.
- (3) The dimensions of any french drain, soakage pit or other similar work must be determined in relation to the absorbent qualities of the soil and the nature and quantity of the effluent.
- (4) The design of french drains serving premises other than a dwelling house must be approved and certified by the Municipality.

(lx) **Conservancy tanks.**

- (1) The Municipality may, on such conditions as it may specify, approve the construction of a conservancy tank and ancillary appliances for the retention sewage or effluent.
- (2) No rain water, storm-water or effluent other than that approved by the Municipality may be discharged into a conservancy tank.
- (3) No conservancy tank may be used as such, unless-
 - (a) the invert of the tank slopes towards the outlet at a gradient of not less than 1 in 10;
 - (b) the tank is gas and water tight;
 - (c) the tank has an outlet pipe, 100 mm in internal diameter, made of wrought iron, cast iron or other approved material and, except if otherwise approved by the Municipality, an approved valve and fittings for connection to removal vehicles;
 - (d) the valve and fittings referred to in paragraph (c) or the outlet end of the pipe, as the case may be, are located in a chamber having an approved hinged cover and situated in such position as required by the Municipality; and
 - (e) access to the conservancy tank is provided by means of an approved manhole fitted with a removable cast iron cover placed immediately above the visible spigot of the inlet pipe.
- (4) The Municipality may, having regard to the position of a conservancy tank or the point of connection for a removal vehicle, make it a condition of its emptying the tank that the owner or consumer indemnify the Municipality, in writing, against any liability for any damages that may result from rendering that service. Where the removal vehicle has to traverse private premises for the emptying of a conservancy tank, the owner must-
 - (a) provide a roadway at least 3,5 m wide, so hardened as to be capable of withstanding a wheel load of four metric tons in all weather; and

- (b) ensure that no gateway through which the vehicle is required to pass to reach the tank, is less than 3,5m wide.
- (5) The owner or occupier of premises on which a conservancy tank is installed must at all times maintain the tank in good order and condition.

(lxi) **Operation and maintenance of on-site sanitation services.**

The operation and *maintenance* of on-site sanitation services and **all** costs pertaining thereto remain the responsibility of the owner of the premises, unless the on-site sanitation services are subsidised services determined in accordance with the Customer **Care** and Revenue Management By-laws.

(lxii) **Disused conservancy and septic tanks.**

- (1) If an existing conservancy tank or septic tank is no longer required for the storage or treatment of sewage, or if permission for such use is withdrawn, the owner must-
 - a. cause it to be completely removed; or
 - b. cause it to be completely filled with earth or other suitable material.
- (2) The Municipality may-
 - (a) require the tank to be reasonably dealt with in another way; or
 - (b) approve the use of the tank for other purpose subject to such conditions as it may specify.

(lxiii) **Services associated with on-site sanitation services.**

- (1) The Municipality may undertake in specified areas to-
 - a. remove or collect conservancy tank contents; or
 - b. remove or collect night soil.
- (2) Copies of the schedule are available at the municipal offices on request.

(lxiv) **Charges in respect of services associated with on-site sanitation services.**

- (1) Charges in respect of the removal or collection of conservancy or septic tank contents or night soil are based on-
 - a. the volume removed or collected; and
 - b. the distance travelled to effect such removal.
- (2) If the volume of the contents of a conservancy or septic tank removed or collected or of night soil removed or collected cannot be quantified, the Municipality may charge a prescribed fixed charge, as determined from time to time.

(lxv) Provision of connecting sewer.

- (1) If a services agreement for the use of the sewage disposal system exists and no connecting sewer exists in respect of the premises, the owner must immediately apply on the prescribed form for a connecting sewer to be installed and-
 - a. must pay the prescribed tariff for the installation of such a connecting sewer; or
 - b. with the approval by the Municipality, install the connecting sewer in accordance with any specifications of the Municipality.
- (2) If the owner applies for use of the sewage disposal system on premises which is so situated that it is necessary to extend the sewer in order to connect the sewage disposal system to the premises, the Municipality may agree to the extension subject to such conditions as it may impose.
- (3) Only the Municipality may install or approve an installed connecting sewer.
- (4) The owner or consumer may connect the sanitation installation to the connecting sewer.
- (5) A person may not commence with any development on any premises unless the Municipality has installed a connecting sewer.

(lxvi) Location of connecting sewer.

- (1) A connecting sewer provided and installed by the Municipality or owner in terms of section 70 must be located in a position agreed to between the owner and the Municipality and be of a size determined by the Municipality; and
 - a. terminate at a connection point approximately one metre inside the premises from the boundary of the land owned by or vested in the Municipality or over which the Municipality has a servitude or other right or when subsection (3) applies, at the connecting point designated in terms of that subsection.
- (2) In reaching agreement with an owner concerning the location of a connecting sewer, the Municipality must determine-
 - (a) practical restrictions that may exist regarding the location of a connecting sewer pipe;
 - (b) the cost implications of the various possible locations of the connecting sewer; and
 - (c) whether or not the Municipality requires the owner to fix the location of the connecting sewer by providing a portion of his or her water installation at or outside the boundary of his or her premises for the Municipality to connect to such installation.
- (3)
 - (a) The Municipality may at the request of a person and subject to such conditions as it may impose, agree to a connection to a sewer other than that which is most readily available for the drainage of the premises.
 - (b) The person concerned is then responsible for-
 - (i) any extension of the drainage installation to the connecting point designated by an authorized officer; and

- (ii) obtaining at his or her cost, such servitudes over other premises as may be necessary.
- (4) An owner must pay the relevant charge set out in the prescribed tariff before a connection to the connecting sewer can be effected.
- (5) Where an owner is required to provide a sewage lift as provided for in terms of the Building Regulations, the Municipality must approve the rate and time of discharge into the sewer.

(lxvii) Provision of one connecting sewer for several consumers on same premises.

- (1) Despite section 70, but subject to subsection (2) (b), only one connecting sewer to the sewage disposal system may be provided for the disposal of sewage from any premises, irrespective of the number of accommodation units of consumers located on such premises.
- (2) Where the owner, or the person having the charge or management of any premises on which several accommodation units are situated, requires the disposal of sewage from several accommodation units, the Municipality may provide and install either-
 - (a) a single connecting sewer in respect of the premises as a whole or any number of such accommodation units; or
 - (b) a separate connecting sewer for each accommodation unit or any number thereof.
- (3) Where the Municipality has installed a single connecting sewer as contemplated in subsection (2) (a), the owner or the person having the charge or management of the premises, as the case may be-
 - (a) must, if the Municipality so requires, install and maintain on each branch pipe extending from the connecting sewer to the different accommodation units-
 - (i) a separate connecting sewer; and
 - (ii) an isolating valve; and
 - (b) is liable to the Municipality for the tariffs and charges for all sewage disposed from the premises through such a single connecting sewer, irrespective of the fact that by such connecting sewer, different quantities of sewage are disposed by the different consumers served.
- (4) Despite subsection (1), the Municipality may authorise that more than one connecting sewer be provided on the sewage disposal system for the disposal of sewage from any premises comprising sectional title units or, if undue hardship or inconvenience would be caused to any consumer on such premises by the provision of only one connecting sewer.
- (5) Where the provision of more than one connecting sewer is authorized by the Municipality, the tariffs and charges for the provision of a connecting sewer must be paid in respect of each sewage connection so provided.

(lxviii) Interconnection between premises.

- (1) An owner of one or more premises must, subject to subsection(2), ensure that no interconnection exists between the drainage installation on his or her premises and the drainage installation on other premises.
- (2) Interconnection may exist only if he or she-
 - (a) has obtained the prior written consent of the Municipality; and
 - (b) complies with any conditions that it may have imposed.

(lxix) **Disconnection of draining installation from connecting sewer.**

The Municipality may disconnect a drainage installation from the connecting sewer and remove the connecting sewer if-

- a. the agreement for provision has been terminated and it has not received an application for subsequent provision to the premises served by the sewer within a period of 90 days of such termination; or
- b. the building on the premises concerned has been demolished.

Part 4

Standards and Conditions of Supply

(lxx) **Standard for sanitation services.**

Sanitation services provided by the Water Services Provider must comply with the minimum standards set for the provision of sanitation services in terms of section 9 of the Act.

Part 5

Methods for determining discharges

(lxxi) **Measurement of quantity of standard domestic effluent discharged.**

- (1) The quantity of standard domestic effluent discharged will be regarded to be a percentage of water supplied by the Municipality, but where such a percentage in respect of specific premises is excessive, having regard to the purposes for which water is consumed on those premises, the Municipality may reduce the percentage applicable to those premises to a figure which, in the light of the available information, reflects the proportion between the likely quantity of sewage discharged from the premises and the quantity of water supplied thereto.
- (2) Where premises are supplied with water from a source other than or in addition to the Municipality's water supply system, including abstraction from a river or borehole, the quantity will be regarded to be a percentage of the total water used

on those premises as may be reasonably estimated by the Municipality.

(lxxii) Measurement of quantity and determination of quality of industrial effluent discharged.

- (1) The quantity of industrial effluent discharged into the sanitation system must be determined-
 - a. where a measuring device is installed, by the quantity of industrial effluent discharged from a premises as measured by that measuring device; or
 - b. until such time as a measuring device is installed, by a percentage of the water supplied by the Municipality to those premises as may be reasonably estimated by the Municipality.
- (2) Subject to regulation 9 of Regulation 22355 promulgated in terms of the Act on 8 June 2001, the Municipality may require the owner of any premises to incorporate in any drainage installation which convey industrial effluent to a sewer, a control meter or gauge or other device of an approved type and in the control of the Municipality for the purpose of ascertaining the tempo, volume or composition of the effluent.
- (3) The Municipality may install and maintain any such meter, gauge or device at the expense of the owner of the premises on which it is installed.
- (4) Where premises are supplied with water from a source other than or in addition to the Municipality's water supply system, including abstraction from a river or borehole, the quantity of industrial effluent will be regarded to be a percentage of the total water used on that premises as may be reasonably estimated by the Municipality.
- (5) The Municipality may on application reduce the assessed quantity of industrial effluent where a portion of the water supplied to the premises-
 - (a) forms part of the end product of any manufacturing process; or
 - (b) is lost by reaction or evaporation during the manufacturing process or for any other reason,
- (6) The Municipality may enter into a services agreement with any person who discharges industrial effluent into the sanitation system, to establish an alternative method of assessing the quantity and rate of effluent so discharged.
- (7) Charges relating to the quality of industrial effluent are based on the formula for industrial effluent discharged as set out in Schedule 4.
- (8) The following conditions apply in respect of the assessment of the quality of industrial effluent discharged-
 - (a) Each consumer must conduct the prescribed tests, on a regular schedule as provided for in the approval to discharge industrial effluent under section 100, and report the results to the Municipality;
 - (b) the Municipality may conduct random compliance tests to correlate those of the industry, and-
 - (i) if discrepancies are found, the values of the Municipality are to be taken as correct; and

- (ii) further tests may be requested by the Municipality to determine the values for the formula, at the cost of the consumer;
- (c) the average of the values of the different analyses results of 24 hourly composite or snap samples of the effluent, taken during the period of charge, must be used to determine the quality charges payable;
- (d) in the absence of a complete daily set of 24 hourly composite or snap samples, the average of not less than two values of the sampled effluent, taken during the period of charge, must be used to determine the charges payable;
- (e) in order to determine-
 - (i) the strength (chemical oxygen demand, suspended solids concentration, Ammonia concentration, ortho-phosphate concentration) in the effluent;
 - (ii) the concentration of Groups 1 and 2 metals;
 - (iii) the pH value; and
 - (iv) conductivity,

the Municipality must use the tests normally used by municipalities for these respective purposes,¹ and test results from an accredited laboratory will have precedence over those of the Municipality;
- (f) the strength must be calculated on the basis of the different analyses results of individual snap or composite samples, and the period applicable to the calculation may not be less than one full 24-hour period, unless strong evidence is submitted to the Municipality that a lesser period is actually applicable;
- (g) the terms of the industrial effluent formula may not assume a negative value;
- (h) the total system values for quality charges must remain constant, initially for a period of one month, but in any case not longer than 12 months from the date of commencement of these charges, after expiry of which they may be amended or revised from time to time depending on such changes in the analyses results or further samples as may be determined from time to time, but the Municipality, in any particular case, may levy the minimum charges contemplated in subsection (7) without taking any samples;
- (i) whenever the Municipality takes a sample, one half thereof must be made available to the consumer;
- (j) for the purpose of calculating the quantity of effluent discharged from each point of discharge of effluent, the total quantity of water consumed on the premises must be allocated among the several points of discharge as accurately as is reasonably practicable;
- (k) the costs of conveying and treating industrial effluent must be determined and apply with effect from such date as may be determined; and the Municipality may change the charges for industrial effluent to a fixed monthly charge, and the minimum charge is to be determined taking into consideration the effluent strengths, the volume and the economic viability of micro and small industries.

(Editorial Note: Numbering as per original *Provincial Gazette*.)

1 Details of the appropriate test may be ascertained from the Municipality or SABS.

(lxxiii) Reduction in measured quantity of effluent discharged.

- (1) A person is entitled to a reduction in the quantity of effluent discharged into the sanitation system as determined in terms of sections 76 and 77 if he or she can demonstrate that the quantity of water on which the percentage is calculated was measured during a period when water was wasted or a leakage went undetected.
- (2) The reduction in the quantity is based on the quantity of water loss through leakage or wastage during the leak period.
- (3) The leak period is, whichever results in the greater reduction in the quantity, either-
 - a. the measuring period immediately before the date of repair of the leak; or
 - b. the measurement period during which the leak is repaired,
- (4) The quantity of water loss must be calculated as the consumption for the leak period less an average consumption, based on the preceding three months, for the same length of time, and if no previous consumption history is available, the average water consumption must be determined by the Municipality after due consideration of all information.
- (5) There may be no reduction in the quantity if the loss of water, directly or indirectly, resulted from the consumer's failure to comply with, or is in contravention of these or other by-laws of the Municipality.

Part 6 Drainage installations

(lxxiv) Installation of drainage installations.

- (1) The owner must provide and maintain his or her drainage installation at his or her own cost and must ensure that the installation is situated within the boundary of his or her premises, except where otherwise approved.
 - a. The Municipality may specify in an approval-
 - (i) to what point in the sewer a drainage installation is to be connected;
 - (ii) at what depth below the ground a drainage installation is to be connected; and
 - (iii) the route to be followed by the drain to the connecting point; and
 - (b) require the owner not to commence with the construction or connection of the drainage installation until the Municipality's connecting sewer has been laid.
- (3) A drainage installation constructed or installed must comply with-
 - (a) any applicable specifications in terms of the Building Regulations; and
 - (b) any standards prescribed in terms of the Act.
- (4) A person may not permit the entry of any liquid or solid substance whatsoever,

other than clean water for testing purposes, to any drainage installation before the drainage installation has been connected to the sewer.

- (5) The plumber responsible for executing the work must after the completion of any drainage installation or after any alteration to any drainage installation is completed, submit to the building inspection section of the Municipality a certificate certifying that the work was completed to the standards as set out in the Building Regulations, this By-law and any other relevant law or by-laws.

(lxxv) **Construction or installation of drainage installations.**

- (1) Where the draining installation is a pit latrine, it must be of the ventilated improved pit latrine type or equivalent having-
 - a. a pit latrine of at least 2m³ capacity;
 - b. lining as required;
 - c. a slab designed to support the superimposed loading; and
 - d. protection preventing children from falling into the pit.
- (2) A pit latrine must conform with the following specifications-
 - (a) The pit must be ventilated by means of a pipe, sealed at the upper end with insect proof screening fixed in place;
 - (b) the ventilation pipe-
 - (i) may not project less than 0.5 m above the nearest roof;
 - (ii) must be of at least 150 mm in diameter; and
 - (iii) must be installed vertically with no bend;
 - (c) the interior of the closet must be finished smooth so that it can be kept in a clean and hygienic condition;
 - (d) the superstructure must be ventilated in order to allow the free flow of air into the pit to be vented through the pipe;
 - (e) the opening through the slab must be of such size as to prevent fouling, and the rim must be raised so that liquids used for washing the floor do not flow into the pit; and
 - (f) the pedestal must be equipped with a lid to prevent the egress of flies and other insects when the toilet is not in use;
- (3) A pit latrine must be sited in a position that is independent of the residential structure and is accessible to a road vehicle having a width of 3.0 m in order to facilitate the emptying of the pit.
- (4) In situations where-
 - (a) there is the danger of polluting an aquifer due to the permeability of the soil, the pit of a pit latrine must be lined with an impermeable material that will not crack under stress; and
 - (b) the ground in which the pit of the pit latrine is to be excavated is unstable, support is to be given to prevent the collapse of the soil into the pit.

- (5) A pit latrine should not be used by more than one household.
- (6) A pit latrine must have access to water for hand washing within 10 metres of the pit latrine.
- (7) The Municipality may levy a charge in the form of a monthly contribution, or levied as a single payment when the service is rendered, that covers all the operating and maintenance costs in the-
 - (a) removal of the pit contents;
 - (b) transportation to a disposal site;
 - (c) treatment of the contents to achieve a sanitary condition; and
 - (d) final disposal of any solid residues.

(lxxvi) Disconnection of drainage installations.

- (1) Except for the purpose of carrying out maintenance or repair work, no drainage installation may be disconnected from the connection point.
- (2) Where any part of a drainage installation is disconnected from the remainder thereof because it will no longer be used, the disconnected part must, unless the Municipality approves otherwise-
 - (a) be destroyed; or
 - (b) entirely removed from the premises on which it was used.
- (3) The Municipality must issue a certificate to certify that the disconnection has been completed in terms of the Building Regulations-
 - (a) after all the requirements of the Building Regulations in regard to disconnection have been complied with; and
 - (b) on request of the owner.
- (4) Any charges raised in respect of the disconnected portion of the drainage installation must cease to be levied with effect from the first day of the month following the issue of such certificate.
- (5) When a drainage installation is disconnected from a sewer, the Municipality
 - (a) must seal the opening so caused; and
 - (b) may recover the cost of such work from the owner of the premises on which the installation is disconnected.
- (6) Where a drainage system is connected to or disconnected from the sewer system during a month, charges must be calculated as if such connection was made on the first day of the month following the month in which such connection or disconnection was effected.

(lxxvii) Drains in streets or public places.

A person may not, except with the prior written permission of the Municipality and subject to such conditions as it may impose, for the purpose of conveying sewage derived from whatever source, lay or construct a drain on, in or under a street, public

place or other land owned by, vested in, or under the control of, the Municipality.

(lxxviii) Construction by Municipality.

The Municipality may agree with the owner of any premises that any drainage work which the owner desires, or is required to construct in terms of Part P of SABS 0400-1990, will be constructed by the Municipality against payment, in advance or on demand, of all costs associated with the construction.

(lxxix) Maintenance of drainage installation.

- (1) An owner must provide and maintain his or her drainage installation at his or her own cost.
- (2) Where any part of a drainage installation is used by two or more owners or occupiers, they are jointly and severally liable for the maintenance of the installation.
- (3) The owner of any premises-
 - (a) must ensure that each sewage manhole on the premises is permanently visible and accessible; and
 - (b) is responsible for ensuring the visibility of each cleaning eye and manhole on the premises at all times.
- (4) Any person who requests the Municipality to clear a drainage installation is liable to pay the appropriate charge set out in the prescribed tariff.
- (5) The Municipality may, on the written application of the owner or occupier of any premises, inspect and test the drainage installation of the premises or a section thereof and may recover from the owner or occupier the cost of the inspection and test, calculated at the rate specified in the prescribed tariff.

(lxxx) Technical requirements for drainage installations.

All drainage installations must comply with SABS 0252 and the Building Regulations.

(lxxxi) Drains.

- (1) Drains passing through ground which are liable to movement, must be laid on a continuous bed of river sand or similar granular material not less than 100 mm thick under the barrel of the pipe with a surround of similar material and thickness, and the joints of such drains must be approved flexible joints.
- (2) A drain or part thereof may only be laid within, pass under or through a building with the approval of the Municipality. A drain or part thereof which is laid in an inaccessible position under a building may not bend or be laid at a gradient less than 1:50.
- (3) If a drain passes through or under a wall, foundation or other structure, precautions must be taken to prevent the discharge of any substance into such a drain.

(lxxxii) Sewer blockages.

- (1) A person may not cause or permit such an accumulation of grease, oil, fat, solid matter or any other substance in any trap, tank, or fitting as will cause its blockage or ineffective operation.
- (2) When the owner or occupier of premises has reason to believe that a blockage has occurred in any drainage installation on the premises, he or she must immediately take steps to have it cleared.
- (3) When the owner or occupier of premises has reason to believe that a blockage has occurred in the sewer system, he or she must immediately inform the Municipality in writing of it.
- (4) Where a blockage occurs in a drainage installation, any work necessary for its removal must be done by or under the supervision of a plumber.
- (5) Should a drainage installation on premises overflow as a result of an obstruction in the sewer, and the obstruction was caused by objects emanating from the drainage installation, the owner of the premises served by the drainage installation is liable for the cost of clearing the blockage.
- (6) Where a blockage has been removed from a drain or portion of a drain which serves two or more premises the owners are jointly and severally liable for the cost of clearing the blockage.
- (7) Where a blockage in the sanitation system has been removed by the Municipality and such removal necessitated the disturbance of an owner's paving, lawn or other artificial surface, the Municipality is not responsible for reinstating it.

(lxxxiii) Grease traps.

A grease trap of approved type, size and capacity must be provided-

- a. in respect of each premises that discharges sewage into on-site sanitation systems; or
- b. where the discharge of grease, oil and fat is likely to-
 - i. cause an obstruction to the flow in sewers or drains; or
 - ii. interfere with the proper operation of any waste water treatment plant.

(lxxxiv) Industrial grease traps.

- (1) Industrial effluent which contains, or is likely to contain grease, oil, fat or inorganic solid matter in suspension must, before it is allowed to enter any sewer, be passed through one or more tanks or chambers of approved type, size and capacity designed to intercept and retain such grease, oil, fat or solid matter.
- (2) Oil, grease or any other substance which is contained in any industrial effluent or other liquid and which gives off an inflammable or noxious vapour at a temperature of or exceeding 20°C, must be intercepted and retained in a tank or chamber so as to prevent entry thereof into the sewer.

- (3) A tank or chamber which is referred to in subsection (2) must comply with the following requirements-
 - (a) It must be of adequate capacity, constructed of hard durable materials, and water-tight when completed;
 - (b) the water-seal of its discharge pipe may be not less than 300 mm in depth; and
 - (c) it must be provided with such number of manhole covers as may be adequate for the effective removal of grease, oil fat and solid matter.
- (4) Any person who discharges effluent to a tank or chamber must-
 - (a) regularly remove grease, oil, fat or solid matter from the tank or chamber; and
 - (b) maintain a register in which the following is contained-
 - (i) The dates on which the tank or chamber was cleaned;
 - (ii) the name of the company which was employed to clean the tank or chamber; and
 - (iii) a certificate from the cleaning company-
 - (aa) certifying that the tank or chamber was cleaned; and
 - (bb) stating the manner in which the contents of the tank or chamber were disposed of.

(lxxxv) Mechanical appliances for lifting sewage.

- (1) The owner of any premise must in accordance with subsection (2) apply for the approval and obtain the approval of the Municipality before he or she installs any mechanical appliance for the raising or transfer of sewage in terms of the Building Regulations. A Professional Engineer must apply for approval, and the application must
 - (a) be accompanied by drawings prepared in accordance with the relevant provisions of the Building Regulations; and
 - (b) show details of-
 - (i) the compartment containing the appliance;
 - (ii) the sewage storage tank;
 - (iii) the stilling chamber and its position; and
 - (iv) the position of the drains, ventilation pipes, rising main and the sewer connection.
- (2) Despite any approval given in terms of subsection (1), the Municipality is not liable without fault for any injury or damage to life or property caused by the use, malfunctioning or any other condition arising from the installation or operation of a mechanical appliance for the raising or transfer of sewage.
- (3) Every mechanical appliance installed for the raising or transfer of sewage must be-

- a. specifically designed for the purpose; and
 - b. fitted with a discharge pipe, sluice valves and non-return valves located in approved positions.
- (4) Unless otherwise permitted by the Municipality, such mechanical appliances must be installed in duplicate and each appliance must be so controlled that either will immediately begin to function automatically in the event of failure of the other.
 - (5) Every mechanical appliance forming part of a drainage installation must be so located and operated as to not cause any nuisance through noise or smell or otherwise, and every compartment containing any such appliance must be effectively ventilated.
 - (6) The maximum discharge rate from any mechanical appliance and the times between which the discharge may take place must be as determined by the Municipality which may, at any time, require the owner to install such fittings and regulating devices as may be necessary to ensure that the determined maximum discharge rate is not exceeded.
 - (7) A sewage storage tank must be provided in conjunction with a mechanical appliance, except where sewage storage space is incorporated as an integral part of the appliance.
 - (8) Every sewage storage tank required in terms of subsection (8) must-
 - a. be constructed of hard, durable materials and must be watertight and the internal surfaces of the walls and floor must be rendered smooth and impermeable;
 - b. have a storage capacity below the level of the inlet equal to the quantity of sewage discharged there into in 24 hours, or 900 litres, whichever is the greater quantity; and
 - c. be so designed that the maximum proportion of its sewage content is emptied at each discharge cycle of the mechanical appliance.
 - (9) Every storage tank and stilling chamber must be provided with a ventilation pipe in accordance with the Municipality's specifications.

(lxxxvi) Installation of pre-treatment facility.

The Municipality may require that any new premises must be provided with a minimum pre-treatment facility of a type specified by it prior to that premises being connected to the sewage disposal system.

Part 7

Protection of infrastructure

(lxxxvii) Protection from ingress of flood waters.

Where premises is situated in the 1 in 50 years flood plain, the top level of service access holes, inspection chambers and gullies must be above the 1 in 50 years flood

level, except if, in the case of service access holes and inspection chambers, the cover is secured in place by approved means.

(lxxxviii) Trespassing on sewage disposal system.

A person may not, without the prior written permission of an authorized officer enter-

- a. upon an area used for the purpose of the sewage disposal system-
 - i. if the area is enclosed by a fence; or
 - ii. if entry is prohibited by notice boards; or
- b. a structure used by the Municipality in connection with its sewage disposal system.

(lxxxix) Interference with sewage disposal system.

Except with the prior authority of an authorized officer, no person may-

- a. interfere or tamper with the sewage disposal system;
- b. make a connection to the sewage disposal system save as contemplated in section 58;
- c. within an area that is subject to a sewer servitude-
 - i. construct a building; or
 - ii. raise or lower the ground level.

(xc) Damage to sewage disposal system.

- (1) A person may not damage or endanger the sewage disposal system, or cause or permit it to be damaged or endangered.
- (2) A person who intends performing work which may cause damage to the sewage disposal system on land owned by or vested in the Municipality or over which it has a servitude or other right, must, before he or she commences the work, ascertain from an authorized officer if any part of the sewage disposal system is situated on the land.
- (3) If work which could damage or endanger the sewage disposal system is to be performed or is being performed on land referred to in subsection (2), or on land adjacent thereto, the authorized officer may by notice in writing require the person concerned not to commence, or to cease performing the work until such time as he or she has complied with the conditions specified in the notice

(xci) Consequential maintenance of sewers.

Whenever a sewer is damaged or becomes obstructed or in need of repair as a result of the act or omission of any person, whether by reason of the failure of such person to comply with the requirements of this By-law or otherwise, the Municipality may carry out such work of maintenance or repair as is necessary or remove the obstruction and

recover from him or her the full cost of doing so.

(xcii) **Obstruction to access to sewage disposal system.**

- (1) A person may not prevent or restrict access to a sewage disposal system.
- (2) If a person contravenes subsection (1), the authorized officer may-
 - (a) by written notice require the person to restore access at his or her own costs within a specified period; or
 - (b) if the situation is a matter of urgency, without prior notice, restore access and recover the full costs of doing so from such person.

(xciii) **Work by private person.**

- (1) The Municipality must lay all sewers and connecting sewers, unless it elects not to do so in which case the work must be executed in accordance with the Municipality's conditions of contract applicable to the work and the following provisions apply-
 - a. Any person carrying out such work must, before he or she commences the work-
 - i. lodge with an authorized officer a written indemnity in which he or she indemnifies the Municipality against all liability in respect of any accident or injury to a person or loss or damage to property which may occur as the direct result of the execution of such works; and
 - ii. obtain from an authorized officer the written requirements to be complied with; and
 - b. where the surface of any street or road has been disturbed in the course of such work, only the Municipality may, at the expense of the person carrying out such work, restore the surface.
- (2) Before the surface of a street or road is disturbed, the person must deposit with the Municipality a sum of money which is sufficient to cover the estimated cost of such restoration.
- (3) When the actual cost is greater than the deposit, the excess is recoverable from the person, and when the actual cost is less, any balance must be refunded to the person.
- (4) All work contemplated in subsection (1) (a) must be carried out in accordance with the written requirements by an authorized officer.

Part 8

Industrial effluent

(xciv) **Application for disposal of industrial effluent.**

- (1) A person may not, except with the approval of the Municipality as contemplated in section 7 (2) of the Act, discharge or cause or permit industrial effluent to be discharged into the sanitation system.
- (2) A person or institution must apply for approval, including a renewal of an approval, to the Municipality.
- (3) A person or institution applying as contemplated in subsection (2), must do so in accordance with the provisions of this section, and at his, her or its own expense. If an applicant intends applying simultaneously for approval in terms of this section and any other provision of the Act, he, she or it must deal with each application separately, however, information may be incorporated by reference in one of the applications.
- (4) An application for approval contemplated in subsection (2), must be made to the Municipality in writing on a form similar to the form in Schedule 3.
- (5) The Municipality may call for any additional information or documents reasonably required to enable it to determine whether the proposer or applicant, including a public sector provider, or the water scheme or schemes will comply with the Act, this By-law and the water services development plan of the Municipality, and whether the obligations of the Municipality, imposed on it by the Act, will be met.
- (6) The Municipality may, and it must, if it initially decides to refuse an application made in terms of subsection (1), including an application made by a public sector water provider, prior to making a final decision, meet with the applicant and any organisation reasonably representative of the consumers or potential consumers of the water scheme or schemes, in order to hear representations made by the applicant and such representative organisations in support of, or against, the applications, and it must take such representations into account in arriving at its final decision.

(xcv) **Approval to discharge industrial effluent.**

- (1) The Municipality must, if its records indicate that the capacity of the sanitation system is sufficient to permit the conveyance and effective treatment and lawful disposal of the industrial effluent, for such period and subject to such conditions it may impose, approve the discharge of industrial effluent to the sanitation system.
- (2) A person who wishes to construct or cause to be constructed, a building which is to be used as trade premises, must at the time of lodging a building plan in terms of section 4 of the National Building Regulations and Building Standards Act, 1977 (Act 103 of 1977), also lodge applications for the provision of sanitation services and for approval to discharge industrial effluent.

(xcvi) **Letter of approval.**

In the event of the Municipality granting approval to discharge effluent waste, it must issue to the applicant a letter of approval which contains such conditions as the Municipality may deem appropriate, which conditions are binding on the applicant.

(xcvii) **Unauthorized discharge of industrial effluent.**

- (1) A person may not, except with and in terms of the written approval of the Municipality and in accordance the provisions of this part, discharge or cause or permit to be discharged into the sanitation system any industrial effluent.
- (2) A person to whom such permission is granted must pay to the Municipality the appropriate charge set out in the prescribed tariff.

(xcviii) Quality standards for disposal of industrial effluent.

- (1) A person to whom permission has been granted for disposal of industrial effluent under section 102 must ensure that no industrial effluent is discharged into the sewage disposal system of the Municipality unless the industrial effluent complies with the standards and criteria set out in Schedule 1, Part A and Part B, which Schedule refers.
- (2) The Municipality may, by writing in the permission concerned, relax or vary the standards in Schedule 1, provided that any such relaxation represents the best practicable environmental option.
- (3) In determining whether relaxing or varying the standards in Schedule 1 represents the best practicable environmental option, the Municipality must consider-
 - (a) whether the applicant's undertaking is operated and maintained at optimal levels;
 - (b) whether technology used by the applicant represents the best available option to the applicant's industry and, if not, whether the installation of such technology would entail unreasonable cost to the applicant;
 - (c) whether the applicant is implementing a program of waste minimisation which complies with national and local waste minimisation standards;
 - (d) the cost to the Municipality of granting the relaxation or variation; and
 - (e) the environmental impact or potential impact of such a relaxation or variation.
- (4) A duly qualified sampler may take test samples at any time to ascertain whether the industrial effluent complies with Schedule 1 or any other standard laid down in the written permission, granted in terms of section 101.

(xcix) Conditions for disposal of industrial effluent.

- (1) The Municipality may, in the written permission or at any time, by written notice, require a person to-
 - a. subject the industrial effluent to preliminary treatment to ensure that the industrial effluent conforms to the standards in Schedule 1 before being discharged into the sewage disposal system;
 - b. install such equalising tanks, valves, pumps, appliances, meters and other equipment as are necessary to control the rate and time of discharge into the sewage disposal system in accordance with the conditions imposed by it;
 - c. install, for the conveyance of his or her industrial effluent into the sewage disposal system at a given point, a drainage installation separate from the drainage installation for waste water and standard domestic effluent, and the Municipality may prohibit the person from disposing of his or her

industrialeffluent at any other point and from disposing of his or her waste water and standard domestic effluent by means other than into a sewage disposal system;

- d. construct a pipe conveying his or her industrial effluent to any sewer, a service access point or stop- valve in such position and of such dimensions and materials as the Municipality may specify in the permission or notice;
 - e. provide all such information as may be required by the Municipality to enable it to assess the tariffs or charges due to the Municipality;
 - f. provide adequate facilities such as level or overflow detection devices, standby equipment, overflow catch-pits or other appropriate means to prevent a discharge into the sewage disposal system which contravenes this By-law;
 - g. cause any meter, gauge or other device installed in terms of this section to be calibrated by an independent authority at the cost of the person at such intervals as required by the Municipality and copies of the calibration to be forwarded to it; and
 - h. cause his or her industrial effluent to be analysed as often and in such manner as may be specified by the Municipality, and provide the Municipality with the results of these tests when completed.
- (2) The commercial consumer concerned must bear the cost of any treatment, plant, works or analysis which he or she may be required to carry out, construct or install in terms of subsection (1).
 - (3) The commercial consumer concerned must obtain the written permission of the Municipality for any proposed changes to the composition of industrial effluent discharged into the sewage disposal system.
 - (4) In the event that industrial effluent that does not comply with the standards in Schedule 1 or the written permission issued in respect of that process or premises, is discharged into the sewage disposal system, the commercial consumer must, within 12 hours of such discharge, inform the Municipality of the incident and the reasons therefore.

(c) Withdrawal of approval to discharge industrial effluent.

- (1) The Municipality may withdraw any approval granted under section 101 after giving at least 14 days written notice of its intention, to a commercial consumer authorized to discharge industrial effluent into the sanitation system if the consumer-
 - a. fails to ensure that the industrial effluent discharged conforms to the industrial effluent standards set out in Schedule 1, Part A or the written approval;
 - b. fails or refuses to comply with any notice lawfully served on him or her in terms of this By-law or contravenes any provisions of these By-laws or any condition imposed in terms of any approval granted to him or her; or
 - c. fails to pay the assessed charges in respect of any industrial effluent discharged.
- (2) The Municipality may, on withdrawal of any approval-
 - (a) in addition to any steps prescribed in this By-law, and on 14 days written notice, authorise the closing or sealing of the connecting sewer of the premises; and

- (b) refuse to accept any industrial effluent until adequate steps have been taken to ensure that the industrial effluent to be discharged conforms to the standards set out in section 103.

Part 9

Sewage delivered by road haulage

(ci) **Acceptance of sewage delivered by road haulage.**

The Municipality may subject to such conditions as it may specify, accept sewage for disposal delivered to the Municipality's sewage treatment plants by road haulage.

(cii) **Approval for delivery of sewage by road haulage.**

- (1) A person may not discharge sewage into the Municipality's sewage **treatment** plants by road haulage, except with the approval of the Municipality and subject to such period and any conditions that the Municipality may impose.
- (2) The charges for any sewage delivered for disposal to the Municipality's sewage treatment plants must be assessed by the Municipality in accordance with the prescribed tariffs.

(ciii) **Conditions for delivery of sewage by road haulage.**

When sewage is delivered by road haulage-

- a. the time and place of delivery must be arranged with the Municipality; and
- b. the nature and composition of the sewage must be established prior to the discharge thereof and no person may deliver sewage that does not comply with the standards laid down in this By-law.

(civ) **Withdrawal of permission for delivery of sewage by road haulage.**

The Municipality may withdraw any permission, after giving at least 14 days written notice of its intention to a person permitted to discharge sewage by road haulage if the person-

- a. fails to ensure that the sewage so delivered conforms to the standards prescribed in Schedule 1, Part 1, as applicable, or the conditions in the approval; or
- b. fails or refuses to comply with any notice served on him or her in terms of this By-law; or
- c. contravenes any provision of this By-law or any condition imposed on him or her in terms of any approval; or
- d. fails to pay the relevant charge as assessed in respect of any sewage delivered.

Part 10
Other sanitation services

(cv) Stables and similar premises

The Municipality may approve the connection of stables, cowsheds, dairies, kennels and other premises for the accommodation of animals and tanneries to a drainage installation subject to the payment of relevant charges and such conditions as the Municipality may impose, provided that-

- a. the floor of the premises must be paved with approved impervious materials and graded to a silt trap, grease trap or gully of adequate capacity; and
- b. every part of the floor of the premises must be covered by a roof and otherwise effectively protected to prevent the entry of rain or storm water into the drainage installation.

(cvi) Mechanical food-waste or other disposal units.

The Municipality may approve the connection or incorporation of a mechanical food waster, other disposal unit or garbage grinder into a drainage installation which has a capacity in excess of 500W, subject to the payment of relevant charges and such conditions as the Municipality may impose, provided that-

- a. a water meter is installed by the Municipality;
- b. the Municipality is satisfied that the sewerage and sewage treatment system will not be negatively affected; and
- c. the installation or incorporation is installed in conformity with the Municipality's By-laws relating to electricity.

Part 11

Installation work of sanitation sewers

(cvii) Approval of installation work.

- (1) If an owner wishes to have installation work done, he or she must first apply for and obtain the written approval of the Municipality.
- (2) Application for the approval must be made on the prescribed form and must be accompanied by-
 - (a) the determined charge in the prescribed tariff, if applicable;
 - (b) copies of the drawings as may be determined by the Municipality; and
 - (c) a certificate certifying that the installation has been designed in accordance with any applicable SABSCodes.
- (3) Approval given in terms of subsection (1) lapses at the expiry of a period of 24 months.
- (4) A complete set of approved drawings of installation work must be available at the

site of the work at all times until such work has been completed.

- (5) If installation work has been done in contravention of subsections (1) or (2), the Municipality may by notice require the owner-
 - (a) to rectify the contravention within a specified period; or
 - (b) if work is in progress, to cease the work and to remove all such work which does not comply with this section.

(cviii) **Persons permitted to do installation and other work.**

- (1) A person who is not a plumber or not working under the control of a plumber, may not-
 - a. do installation work other than the replacement or repair of an existing pipe or sanitation fitting;
 - b. inspect, disinfect and test a drainage installation, fire installation or storage tank;
 - c. service, repair or replace a back flow preventer; or
- (2) install, maintain or replace a meter provided by an owner in a drainage installation.
- (3) A person may not require or engage a person who is not a plumber to do the work referred to in subsection.
- (4) Despite subsections (1) and (2), the Municipality may permit a person who is not a plumber to do installation work on his or her own behalf on premises owned and occupied solely by himself or herself and his or her immediate household, but such work must be inspected and approved by a plumber at the direction of the Municipality.

(cix) **Use of pipes and water fittings to be authorized.**

- (1) A person may not, without the prior written authority of the Municipality, install or use a pipe or water fitting in a water installation within the Municipality's area of jurisdiction, unless it is included in the list of approved pipes and water fittings.
- (2) Application for the inclusion of a pipe or water fitting in the list referred to in subsection (1) must be made on the prescribed form.
- (3) A pipe or water fitting may be included in *the* list referred to in subsection (1) if-
 - (a) it bears the standardisation mark of the South African Bureau of Standards in respect of the relevant SABS specification issued by the Bureau; or
 - (b) it bears a certification mark issued by the SABS to certify that the pipe or water fitting complies with-
 - (i) an SABS Mark specification; or
 - (ii) a provisional specification issued by the SABS, provided that no certification marks may be issued for a period exceeding two years; or
 - (c) it is included in the list of water and sanitation installations accepted by JASWIC.
- (4) The Municipality may, in respect of any pipe or water fitting included in the list

referred to in subsection (1), impose such additional conditions as it may consider necessary in respect of the use or method of installation thereof.

- (5) A pipe or sanitation fitting may be removed from the list if it-
 - (a) no longer complies with the criteria upon which its inclusion was based; or
 - (b) is no longer suitable for the purpose for which its use was accepted.
- (6) The current list is available for inspection at the office of the Municipality at any time during working hours.
- (7) The Municipality may sell copies of the current list at the appropriate charge in the prescribed tariff.

(cx) **Testing of drainage installations.**

- (1) The provisions of SABS 1200 apply.
- (2) Where the Municipality has reason to believe that any drainage installation or any part thereof has become defective, it may require the owner thereof to conduct any or all of the tests prescribed in the Code contemplated in subsection (1), and if the installation fails to withstand any such tests, the Municipality may by notice require the owner to take reasonable measures necessary to enable the installation to withstand any or all of the tests.

(cxi) **Cisterns.**

A cistern, and related pan designed to operate with such cistern, may not be installed with a cistern capacity of greater than nine litres, and all cisterns not intended for public use must be fitted with flushing devices allowing interruptible or multiple flushes, but such flushing device is not required in a cistern with a capacity of 4,5 litres or less.

CHAPTER 6

WATER SERVICES INTERMEDIARIES

(cxii) **Application for registration.**

- (1) A person or institution seeking registration with the Municipality as a water services intermediary in terms of section 24 of the Act, must do so in accordance with this section and at his, her or its own expense.
- (2) An application for such registration must be made in writing to the Municipality.
- (3) An application for registration must be accompanied by, at least, the following documents or particulars-
 - (a) if a natural person, a certified copy of the identity document of the applicant;
 - (b) if a legal person-
 - (i) a certified copy of the founding document or constitution of the applicant;
 - (ii) a certified resolution adopted by the management body of the applicant, resolving to apply for registration as a water services intermediary; and
 - (iii) a certified list of the names and addresses of all persons occupying a leadership position and having decision-making power in the applicant's organisation;
 - (c) a detailed statement supported by proof of authenticity, which sets out-
 - (i) the applicant's qualifications;
 - (ii) the applicant's capacity to undertake the work associated with the provision of water services in the circumstances reflected in the application;
 - (iii) the applicant's experience and skills; and
 - (iv) the financial resources available to the applicant to undertake the provision of water services to be provided by the applicant;
 - (d) the grounds upon which the applicant contends that he or she or it is a water services intermediary as defined in the Act;
 - (e) a full and detailed description of the water scheme or schemes which will be operated by the applicant containing information to enable the Municipality to determine whether the water scheme or schemes comply with the criteria set in section 11 of the Act, this By-law and the water development plan adopted by the Municipality in terms of section 15 of the Act, which description must include, but is not be limited to-
 - (i) the name or names of the water scheme or schemes;
 - (ii) an indication of the nature of the water services to be provided by the applicant;
 - (iii) detailed plans or drawings, with co-ordinates and scales, and specifications depicting the physical installation associated with the water scheme or schemes, including all structures, aqueducts, pipes, valves,

pumps, meters or other apparatus relating thereto used or intended to be used by him or her or it in connection with the provision of water services contemplated in the application;

- (iv) a detailed description, including numbers and locality, of the consumers or potential consumers that will be supplied with water services by the applicant;
 - (v) details of the source, the quality and quantity of water that will be supplied to consumers or potential consumers;
 - (vi) what arrangements are in place to ensure that such quality and quantity is consistently maintained;
 - (vii) a business plan setting out how the water scheme or schemes will be operated and maintained during the period the applicant undertakes the supply of water services as contemplated in the application, and what arrangements have been adopted to deal with any emergency, including natural disasters and drought;
 - (viii) a budget describing the financial administration of the water scheme or schemes, the source of any capital or revenue requirements, and an indication of the sustainability of the water scheme or schemes; and
 - (ix) details of charges that the applicant will levy on all consumers, the method of calculating such charges, the process whereby increases or decreases in such tariffs and charges will be dealt with and the manner in which such tariffs and charges comply with the national norm set by the Minister of Water Affairs and Forestry in terms of section 10 of the Act;
- (f) a certificate indicating who the legal owner or owners of the water scheme or schemes is or are;
 - (g) certified copies of all documents and deeds reflecting the legal status of the water scheme or schemes, including deeds of servitude where appropriate;
 - (h) full details of the conditions that will be imposed in terms of section 4 of the Act; and
 - (i) full details required in terms of section 19 (4) of the Act

(cxiii) Additional information to make decision.

- (1) The Municipality may call for any additional information or documents reasonably required to enable it to determine whether
 - a. the proposer or applicant, including a public sector provider, or the water scheme or schemes will comply with the Act, this By-law and the water development plan of the Municipality; and
 - b. the Municipality will be able to meet the obligations imposed on it by the Act. (2) The Municipality, in order to hear representations made by the applicant and such representative organisations in support of, or against, the applications, as the case may be, may and shall, before it makes a final decision, if it initially decides to refuse an application made in terms of subsection (1), including an application made by a public sector water provider, meet with the applicant and any organisation reasonably representative of the consumers or potential consumers of the water scheme or schemes, and it must take such representations into account in arriving at its final decision.

(cxiv) **Approval of application.**

- (1) The Municipality may approve or refuse the application, provided that-
 - a. if it approves the application, it may make such approval subject to such reasonable and relevant conditions as it deems necessary; and
 - b. if it refuses the application, it must advise the applicant in writing of the reasons for such refusal.
- (2) In the event of the Municipality granting such approval it must deliver a written notification thereof to the applicant and in such notice it must-
 - (a) draw the applicants attention to the provisions of sections 25, 26 and 27 of the Act;
 - (b) draw the applicant's attention to the provisions of this Chapter; and
 - (c) set out any conditions imposed under subsection (1) (a).

(cxv) **Provision of water services.**

- (1) A water services intermediary must ensure that water services, including such basic services as determined by the Municipality, are provided to such persons it is obliged to provide with water services.
- (2) The quality, quantity and sustainability of water services provided by a water services intermediary must meet any minimum standards prescribed in terms of the Act and must at least be of the same standards as provided by the Municipality to consumers.

(cxvi) **Charges for water services provided.**

- (1) A water services intermediary may not charge for water services at a price which does not comply with any norms and standards prescribed under the Act and any additional norms and standards as may be determined by the Municipality.
- (2) A Water Services Intermediary must provide subsidised water services, as determined by the Municipality in terms of the Municipality's by-laws relating to credit control and debt collection from time to time to a consumer at a price that is the same or less than the charges at which the Municipality provides such services.

CHAPTER 7

UNAUTHORIZED WATER SERVICES AND RELATED MATTERS

(cxvii) Unauthorized use of water services.

- (1) A person may not gain access to water services from the water supply system, sewage disposal system or any other sanitation services unless a services agreement has been entered into with the Municipality for the rendering of those services.
- (2) The Municipality may, irrespective of any other action it may take against such person in terms of this By-law, by written notice order a person who has gained access to water services from the water supply system, sewage disposal system or any other sanitation services provided by the Municipality without a services agreement with the Municipality for the rendering of those services-
 - (a) to apply for such services in terms of the Customer Care and Revenue Management By-laws of the Municipality; and
 - (b) to undertake such work as may be necessary to ensure that the consumer installation through which access was gained complies with this By-law.
- (3) The provisions of section 131 apply to a notice in terms of subsection (2).

(cxviii) Interference with infrastructure for provision of water services.

- (1) A person other than the Municipality may not manage, operate or maintain a water supply system or any sanitation system unless authorized in writing by the Municipality.
- (2) A person other than the Municipality may not effect a connection to the water supply system or sewage disposal system or render any other sanitation services.
- (3) The Municipality may recover from the offender any costs associated with repairing damage caused as a result of a contravention of subsection (1) or (2), and the costs recoverable by the Municipality is the full cost associated with repairing the damage and includes, but is not restricted to, any exploratory investigation, surveys, plans, specifications, schedules of quantities, supervision, administration charge, the use of tools, the expenditure of labour involved in disturbing or rehabilitating any part of a street or ground affected by the repairs and the environmental cost.

(cxix) Obstruction of access to infrastructure for provision of water services.

- (1) A person may not by constructions prevent or restrict physical access to the water supply system or sewage disposal system.
- (2) If a person contravenes subsection (1), the Municipality may-
 - (a) by written notice require the person to restore access at his or her own expense within a specified period; or

- (b) if the situation is a matter of urgency, without prior notice, restore access and recover the cost from the person.
- (3) The costs recoverable under subsection (2) (b) by the Municipality is the full cost associated with restoring access and includes, but is not restricted to, any exploratory investigation, surveys, plans, specifications, schedules of quantities, supervision, administration charge, the use of tools, the expenditure of labour involved in disturbing or rehabilitating of any part of a street or ground affected by restoring access and the environmental cost.

(cxx) Waste of water unlawful.

- (1) A consumer may not permit-
 - a. the purposeless or wasteful discharge of water from terminal water fittings;
 - b. pipes or water fittings to leak;
 - c. the use of maladjusted or defective water fittings;
 - d. an overflow of water to persist; or
 - e. an inefficient use of water to persist.
- (2) An owner must repair or replace any part of his or her water installation which is in such a state of disrepair that it is either causing or is likely to cause an occurrence listed in subsection (1).
- (3) If an owner fails to take measures as contemplated in subsection (2), the Municipality must, by written notice in terms of section 134 require the owner to comply with the provisions of subsection (2).
- (4) A consumer must ensure that any equipment or plant connected to his or her water installation uses water in an efficient manner.
- (5) The Municipality may, by written notice, prohibit the use by a consumer of any equipment in a water installation if its use of water is inefficient, and the equipment may not be used until its efficiency has been restored and a written application to do so has been approved by the Municipality.

(cxxi) Unauthorized and illegal discharges.

- (1) A person may not discharge or cause or permit any sewage to be discharged directly or indirectly into a storm water drain, river, stream or other watercourse, whether natural or artificial.
- (2) The owner or occupier of any premises on which steam or any liquid, other than potable water, is stored, processed or generated must provide all facilities necessary to prevent any discharge or leakage of such liquid to any street, storm water drain or watercourse, whether natural or artificial, except where, in the case of steam, the Municipality has approved such discharge.
- (3) Where the hosing down or flushing by rainwater of an open area on any premises is likely to cause the discharge of objectionable matter into any street, stormwater drain, river, stream or other watercourse, whether natural or artificial, or to cause or contribute towards the pollution of any such watercourse, the Municipality may, by notice, require the owner of the premises to take reasonable measures to

prevent or minimise such discharge or pollution.

- (4) A person may not discharge or cause or permit the discharge of-
- (a) any substance, including storm water, other than sewage to be discharged into a drainage installation;
 - (b) water from any swimming pool directly or indirectly over any road or into a gutter, storm water drain, watercourse, open ground or private premises other than the premises of the owner of such swimmingpool;
 - (c) water from artificial fountains, reservoirs or swimming pools situated on the premises into a drainage installation, without the approval of the Municipality and subject to the payment of relevant charges setout in the prescribed tariff and under such conditions as the Municipality may impose;
 - (d) any sewage, industrial effluent or other liquid or substance which-
 - (i) may be offensive to or may cause a nuisance to the public;
 - (ii) is in the form of steam or vapour or has a temperature exceeding 44°C at the point where itenters the sewer;
 - (iii) has a pH value less than 6.0;
 - (iv) contains any substance of whatever nature likely to produce or release explosive, flammable, poisonous or offensive gases or vapours in any sewer;
 - (v) contains any substance having an open flashpoint of less than 93°C or which releases apoisonous vapour at a temperature below 93°C;
 - (vi) contains any material of whatever nature, including oil, grease, fat or detergents capable of causing obstruction to the flow in sewers or drains or interference with the proper operation of sewerage treatment works;
 - (vii) shows any visible signs of tar or associated products or distillates, bitumens or asphalts;
 - (viii) contains any substance in such concentration to produce an undesirable taste after chlorination or an undesirable odour or colour, or excessive foam;
 - (ix) has either a greater PV (Permanganate Value) or COD (Chemical Oxygen Demand) value, a lowerpH value, or a higher caustic alkalinity or electrical conductivity than specified in Schedule 2, which Schedule refers, without the prior approval and subject to the payment of relevant charges set out in the prescribed tariff and such conditions as the Municipality may impose;
 - (x) contains any substance which-
 - (aa) cannot be treated at the sewage treatment work to which it could be discharged;
 - (bb) will negatively affect the treatment processes at the sewage treatment work to which it could be discharged; or
 - (cc) will negatively impact on the ability of the sewage treatment work to produce dischargesthat meet the waste water discharge standards set in terms of the National Water Act, 1998 (Act 36 of 1998), or
 - (xi) either alone or in combination with other substance may-

- (aa) generate or constitute a toxic substance dangerous to the health of persons employed at the sewage treatment works or entering the Municipality's sewers or manholes in the course of their duties;
 - (bb) be harmful to sewers, treatment plant or land used for the disposal of treated wastewater; or
 - (cc) adversely affect any of the processes whereby sewage is treated or any re-use of sewage effluent.
- (5) A person may not cause or permit the accumulation of grease, oil, fat or solid matter in any drainage installation that will adversely affect its effective functioning.
- (6) The Municipality may, despite any other actions that may be taken in terms of this By-law, recover from any person who discharges industrial effluent or any substance which is unauthorized or illegal, all costs incurred by the Municipality as a result of such discharges, including costs that result from-
- (a) injury to persons,
 - (b) damage to the sanitation system; or
 - (c) a prosecution in terms of the National Water Act, 1998 (Act 36 of 1998).

(cxxii) Illegal connection.

Where a consumer's access to water supply services has been restricted or disconnected, and he or she-

- a. intentionally unlawfully reconnects to services; or
- b. intentionally or negligently interferes with infrastructure through which water supply services are provided,

then his or her water supply shall on written notice be disconnected.

(cxxiii) Interference with infrastructure.

- (1) A person may not unlawfully and intentionally or negligently interfere with infrastructure by which the Municipality provides municipal services.
- (2) If a person contravenes subsection (1), the Municipality may-
 - (a) by written notice require such person to cease or rectify the interference at his or her own expense within a specified period; or
 - (b) if the situation is a matter of urgency, without prior notice, prevent or rectify the interference and recover the cost from such person.

(cxxiv) Use of water from sources other than water supply system provided by Municipality.

- (1) A person may not use or permit the use of water obtained from a source other than the water supply system or rain water tanks which are not connected to the water installation, except with the prior approval of the Municipality, and in accordance with such conditions as it may impose, for domestic, commercial or industrial purposes.
- (2) Any person desiring the approval referred to in subsection (1) must provide the

Municipality with evidence to the effect that-

- (a) the water referred to in subsection (1) complies, whether as a result of treatment or otherwise, with the requirements of SABS 241: Drinking Water; or
- (3) the use of such water does not or will not constitute a danger to health. An approval given in terms of subsection (1) may be withdrawn if-
 - (a) a condition imposed in terms of subsection (1) is breached; or
 - (b) the water quality no longer conforms to the requirements referred to in subsection (2).
- (4) The Municipality may take samples of water obtained from a source, other than the water supply system, and cause the samples to be tested for compliance with the requirements referred to in subsection (2).
- (5) The relevant charge set out in the prescribed tariff for the taking and testing of the samples referred to in subsection (4) must be paid by the person to whom approval was granted in terms of subsection (1).
- (6) If water obtained from a borehole or other source of supply on any premises is used for a purpose which gives rise to the discharge of such water or a portion thereof into the Municipality's sewerage system, the Municipality may install a meter in the pipe leading from such borehole or other source of supply to the point where it is so used, and the provisions of section 32 apply insofar as they may be applicable in respect of the meter.

CHAPTER 8 ENFORCEMENT

(cxxv) **Responsibility for compliance with By-laws.**

- (1) The owner of premises is responsible for ensuring compliance with this By-law in respect of all or any matters relating to any water and sanitation installation, and should an owner contravene a provision with which he or she must comply, he or she commits an offence.
- (2) The consumer is responsible for compliance with this By-law in respect of matters relating to the use of any water and sanitation installation, and should a consumer contravene a provision with which he or she must comply, he or she commits an offence.

(cxxvi) **Notice of compliance and representations.**

- (1) The Municipality may, by a notice of compliance, which must be in writing, order an owner, consumer or any other person who fails, by act or omission, to comply with the provision of this By-law or to any condition imposed thereunder, to remedy such breach within a period specified in the notice, and the notice must specify-
 - a. the name and residential and postal address, if either or both of these be known, of the affected person;
 - b. the provision of this By-law which has not been complied with;
 - c. in sufficient detail to enable compliance with the notice, the measures required to remedy the situation;
 - d. that the person must within a specified period take the measures to comply with the notice, to diligently continue with the measures, and to complete the measures before a specified date;
 - e. that failure to comply with the requirements of the notice within the period contemplated in paragraph (d) is an offence; and
 - f. that written representations, as contemplated in subsection (3), may within the period stipulated under paragraph (d) above, be made to the Municipality at a specified place.
- (2) The Municipality, when considering any measure or period envisaged in subsection (1) (c) and (d), must have regard to-
 - (a) the principles and objectives contained in section 2;
 - (b) the nature of the non-compliance; and
 - (c) any other relevant factors.
- (3) A person may, within the period contemplated in subsection (1) (f), make representations, in the form of a sworn statement or affirmation to the Municipality at the place specified in the notice.
- (4) Representations not lodged within the period will not be considered, except where the person has shown good cause and the Municipality condones the late lodging of the representations.
- (5) The Municipality must consider the representations and any response thereto by an authorized official or any other person, if there be such a response.

- (6) The Municipality may, on its own volition, conduct any further investigations to verify the facts if necessary, and the results of the investigation must be made available to the person, who must be given an opportunity of making a further response if he or she so wishes, and the Municipality must also consider the further response.
- (7) The Municipality must, after consideration of the representations and response, if there be such a response, make an order in writing and serve a copy of it on the person.
- (8) The order must-
 - (a) set out the findings of the Municipality;
 - (b) confirm, alter or set aside in whole or in part, the notice of compliance; and
 - (c) specify a period within which the person must comply with the notice.
- (9) If the notice of compliance is confirmed, in whole or in part, or is altered but not set aside, the Municipality must inform the person that he or she-
 - (a) must discharge the obligations set out in the notice; or
 - (b) may elect to be tried in court.
- (10) If the person elects to be tried in court he or she must, within seven calendar days, notify the Municipality in writing of his or her intention to be so tried.
- (11) If the person does not elect to be tried in court, he or she must, within the manner and time set out in the notice discharge his or her obligations.
- (12) Where there has been no compliance with the requirements of a notice, the person commits an offence, and the Municipality may take such steps as it deems necessary to remedy the situation and the costs thereof must be paid to the Municipality in accordance with section 132.

(cxxvii) Costs.

- (1) Should an owner or consumer fail to take the measures required of him or her by notice, the Municipality may, subject to subsection (3) recover all costs incurred as a result of it acting in terms of section 131 (12) from that person.
- (2) The costs claimed must be reasonable and may include, without being limited to, costs relating to labour, electricity, water, equipment, administrative and overhead costs.
- (3) If more than one person is liable for the costs incurred, the liability must be apportioned by agreement among the persons concerned according to the degree to which each was responsible for the situation existing.
- (4) Costs that are incurred by the Municipality when it does alterations or other works may be recovered from the person on whom the notice was served, or if a deposit has been paid, the costs may be deducted from the deposit.

CHAPTER 9 MISCELLANEOUS PROVISIONS

(cxxviii) **Provision of information.**

An owner, occupier, consumer or person within the area of supply of the Municipality must on written request provide the Municipality with accurate information in writing that is reasonably required by the Municipality for the implementation or enforcement of this By-law.

(cxxix) **Appeal.**

- (1) A person whose rights are affected by a decision of an authorized officer may appeal against that decision in terms of section 62 of the Local Government: Municipal Systems Act, 2000 (Act 32 of 2000), which applies with the necessary changes, by giving written notice of the appeal and reasons to the Municipality within 21 days of the date of the notification of the decision.
- (2) If it is alleged in an appeal that a measuring device is inaccurate, the device must be subjected to a standard industry test to establish its accuracy. The consumer must be informed of the possible cost implications including the estimated amount of such test prior to such test being undertaken.
- (3) The relevant charge set out in the prescribed tariff, if applicable, must be-
 - (a) retained by the Municipality if the measuring device is found not to be defective; or
 - (b) refunded to the applicant if the measuring device is found to be defective.
- (4) A measuring device is regarded to be defective if, when tested in accordance with a standard industry test and found defective, or if the measuring device is a meter, it does not meet generally accepted specifications as set out in the regulations published under section 9 of the Act
- (5) In addition to subsection (4), the Municipality must, if the measuring device is found defective-
 - (a) repair the measuring device or install another device which is in good working order, without charge to the consumer, unless the costs thereof are recoverable from the consumer due to a contravention of this By-law; and
 - (b) determine the quantity of water service for which the consumer will be charged in lieu of the quantity measured by the defective measuring device by applying the provisions of section 56.
- (6) The Municipality must provide to the Water Services Authority a report on a quarterly basis with regard to any queries and complaints in respect of accounts or appeals against the findings of an authorized officer in respect of queries or complaints.

(cxxx) **Authentication and serving of notices and other documents.**

- (1) A notice or other document requiring authentication by the Municipality must be signed by the municipal manager or by an authorized officer and when the notice

or document is issued by the Municipality in terms of this By-law it is regarded to be duly issued if it is signed by an authorized officer.

- (2) Any notice or other document that is served on a person in terms of this By-law is regarded as having been served-
 - (a) when it has been delivered to that person personally;
 - (b) when it has been left at that person's place of residence or business in the Republic with a person apparently over the age of 16 years;
 - (c) when it has been posted by registered or certified mail to that person's last known residential or business address in the Republic, and an acknowledgment of the posting thereof from the postal service is obtained;
 - (d) if that person's address in the Republic is unknown, when it has been served on that person's agent or representative in the Republic in the manner provided by paragraphs (a), (b) or (c);
 - (e) if that person's address and agent or representative in the Republic is unknown, when it has been posted in a conspicuous place on the property or premises, if any, to which it relates;
 - (f) in the event of a body corporate, when it has been delivered at the registered office of the business premises of such body corporate; or
 - (g) when it has been delivered, at the request of that person, to his or her e-mail address.
- (3) Service of a copy is deemed to be service of the original.
- (4) When any notice or other document must be authorized or served on the owner, occupier, or holder of any property, or right in any property, it is sufficient if that person is described in the notice or other document as the owner, occupier, or holder of the property or right in question, and it is not necessary to name that person.
- (5) Any legal process is effectively and sufficiently served on the Municipality when it is delivered to the municipal manager, or a person in attendance at the municipal manager's office.

(cxxxii) Offences.

- (1) A person commits an offence if he or she-
 - a. obstructs or hinders the Municipality in the exercising of the powers or performance of functions or duties under this By-law;
 - b. uses, tampers or interferes with the Municipality's equipment, the water supply system, sanitation system and reticulation network or consumption of services rendered;
 - c. contravenes or fails to comply with this By-law other than a provision relating to payment for municipal services; or
 - d. fails to comply with the written request served upon him or her in terms of section 134;
- (3) A person contemplated in subsection (1) is liable upon conviction to a fine or to a

period of imprisonment or community service not exceeding four months, or in the event of a continued offence to a further fine of R2000,00 for every day the offence is continued.

(cxxxii) Prima facie evidence.

In legal proceedings by or on behalf of the Municipality, a certificate reflecting the amount due and payable to the Municipality, under the hand of the municipal manager must upon mere production of it be accepted by any court of law as prima facie evidence of the indebtedness.

(cxxxiii) Power of entry and inspection.

- (1) An authorized officer may on the authority of a warrant, for any purpose connected with the implementation or enforcement of this By-law, at all reasonable times or in an emergency at any time-
 - a. enter premises;
 - b. request information;
 - c. take samples;
 - d. make such inspection, examination and enquiry and carry out work as he or she may deem necessary, and for these purposes operate any component of the drainage installation.
- (2) If the authorized officer considers it necessary that work be performed to enable him or her properly and effectively to implement a function referred to in subsection (1) he or she may subject to subsection (3)-
 - (a) by written notice require the owner or occupier of the premises at his or her own cost to do specified work within a specified period; or
- (3) if the situation is a matter of urgency, without prior notice, do such work or cause it to be done, at the costs of the owner. If the work referred to in subsection (2) is carried out for the sole purpose of establishing whether a contravention of this By-law has been committed and no such contravention is established, the Municipality must bear the expense connected therewith together with that of restoring the premises to its former condition.
- (4) Any entry and inspection must be conducted in conformity with the requirements of the Constitution of South Africa Act, 1996 (Act 108 of 1996), and any other law and, in particular, with strict regard to decency, order and respect for a person's dignity, freedom and security, and personal privacy.
- (5) An authorized officer may be accompanied by an interpreter and any other person reasonably required to assist the authorized officer in conducting the inspection.
- (6) A person representing the Municipality must, on request, provide his or her identification and authority.

(cxxxiv) Indemnification from liability.

Neither employees of the Municipality nor any person, body, organization or corporation acting on behalf of the Municipality is liable for any damage arising from any omission

or act done in good faith without any fault in the course of his or her duties.

(cxxxv) Exemption.

- (1) The Municipality may, in writing, exempt an owner, consumer, any other person or category of owners, consumers or other persons from complying with a provision of this By-law, subject to any conditions it may impose if the application or operation of that provision would be unreasonable, but the Municipality may not grant exemption from any section of this By-law that may result in-
 - a. the wastage or excessive consumption of water;
 - b. the evasion or avoidance of water restrictions;
 - c. significant negative effects on public health, safety or the environment;
 - d. the non-payment for services;
 - e. the installation of pipes and fittings which are not approved; and
 - f. the Act, or any regulations made in terms thereof, not being complied with.
- (2) The Municipality may at any time after giving written notice of at least 30 days, withdraw any exemption given.
- (3) The Municipality must review all exemptions quarterly.
- (4) The Municipality must consider a submission for exemption at the next ensuing Municipality meeting immediately following receipt of a submission, and should the Municipality fail to do so or the meeting fail to address the issue and take a resolution, the applicant for exemption may appeal to the Member of the Executive Committee of the Provincial Government charged with the administration of local government affairs ("the MEC") to intervene in the matter.

(cxxxvi) Availability of By-laws.

- (1) A copy of this By-law must be included in the Municipality's Municipal Code as required in terms of section 15 of the Local Government: Municipal Systems Act, 2000 (Act 32 of 2000).
- (2) A copy of this By-law must be available for inspection at the offices of the Municipality at all reasonable times.
- (3) A copy of this By-law may be obtained from the Municipality against payment of the relevant fee set out in the prescribed tariff.

(cxxxvii) Conflict of law.

If there is any conflict between this By-law and any other by-laws of the Municipality, this By-law prevail, subject to section 33 (2) of the Customer Care and Revenue Management By-laws.

(cxxxviii) Co-operation between municipalities and application.

- (1) In an effort to achieve optimal servicedelivery, the Municipality may enter into agreements with the District Municipality in respect of the following-
 - a. Practical arrangements with regard to the execution of the provisions of this By-law;
 - b. recovery of costs and expenses;
 - c. mechanisms for the settlement of disputes with regard to the execution of powers or a matter on whichthere has been an agreement;
 - d. any other matter regarded as being necessary by the District Municipality and the Municipality to achieve optimal service delivery.
- (2) The provisions of this By-law apply to the jurisdictional area of the Municipality.

(cxxxix) Liaison forums in community.

- (1) The Municipality may establish one or more liaison forums in acommunity for the purposes of-
 - a. creating conditions for a local community to participate in the affairs of the Municipality;
 - b. encouraging a local community to participate in the affairs of the Municipality; and
 - c. promoting the achievement of efficient water supply and sanitation services.
- (2) A liaison forum may consist of-
 - (a) a member of members of an interest group;
 - (b) a member or members of a community in whose immediate area an efficient water supply and sanitation services are lacking;
 - (c) a designated official or officials of the Municipality; and
 - (d) the councillor responsible for water supply and sanitation services..
- (3) (a) The Municipality may, when considering an application for consent, permit or exemption certificate interms of this By-law, where applicable, request the input of a liaison forum.

(b) A liaison forum or any person or persons contemplated in subsection (2) may, on own initiative submitan input to the Municipality for consideration.

(cxl) Transitional arrangements.

- (1) Installation work authorized by the Municipality prior to the commencement date of this By-law or authorized installation work in progress on such date is regarded to have been authorized in terms of this By-law, and the Municipality may for a period

of 90 days after the commencement of this By-law authorise installation work in accordance with the By-laws that regulated such work immediately prior to the promulgation of this By-law.

- (2) Any reference in this By-law to a charge determined by the Municipality is regarded to be a reference to a charge determined by the Municipality under the laws repealed by section 146, until the effective date of any applicable charges that may be determined by the Municipality in terms of this By-law or by-laws relating to credit control and debt collection, and any reference to a provision in the laws repealed by section 146 is regarded to be a reference to the corresponding provision in this By-law.
- (3) Any approval, consent or exemption granted under the laws repealed by section 146, save for the provisions of subsection (2), remain valid.
- (4) A consumer is not required to comply with this By-law by altering a water installation or part thereof which was installed in conformity with any laws applicable immediately prior to the commencement of this By-law. If, however, the installation or part thereof is so defective or in such a condition or position as to cause waste or undueconsumption of water, pollution of the water supply or a health hazard, the Municipality may by notice require the consumer to comply with the provisions of this By-law.
- (5) Despite subsection (4), no flushing urinal that is not user-activated may be installed or continue to operate in any water installation, and all flushing urinals that are not user-activated installed before this By-law commence, must be converted to user-activated urinals within two years of the commencement of this By-law.

(cxli) Repeal of existing water services by-laws.

The following by-laws are hereby repealed-

- a. Any by-law previously promulgated by the municipality or any of the disestablished municipalities now incorporated into the municipality, in so far as it relates to any matter provided for in this By-law; and
- b. Any by-law previously promulgated by the Cacadu District Municipality or any of its predecessors, in so far as it has been made applicable to the municipality by the authorisation for the execution of powers and functions in terms of section 84 (3) of the Municipal Structures Act, 117 of 1998.

(cxlii) Short title and commencement.

- (1) This By-law is called the Water Supply and Sanitation Services By-laws, and commences on the date of publication thereof in the *Provincial Gazette*.
- (2) The Municipality may, by notice in the *Provincial Gazette*, determine that the provisions of this By-law, listed in the notice, do not apply in certain areas within its area of jurisdiction listed in the notice from a date specified in the notice.

SCHEDULE 1 QUALITY STANDARDS

PART A

Quality standards for disposal of industrial effluent

Acceptance of industrial effluent for discharge into the sewage disposal system

No industrial effluent shall be accepted for discharge into the sewage disposal system unless it complies with the following conditions.

The industrial effluent shall not contain concentrations of substances in excess of those stated below

Large works general quality limits are applicable when an industry's effluent discharges in a catchment leading to a sewage works of greater than 25 MI/d capacity. Small Works quality limits apply for catchments leading to sewage works with less than 25 MI/d capacity.

GENERAL QUALITY LIMITS	LARGE WORKS >25 MI/d	SMALL WORKS <25 MI/d	UNITS
1. Temperature °C	44 C	44 C	Degrees Celsius
2. pH	6 pH 10	6,5 pH 10	pH units
3. Oils, greases, waxes of mineral origin	50	50	mg/
4. Vegetables oils, greases, Waxes	250	250	mg/
5. Total sugar and starch (as glucose)	1 000	250	mg/
6. Sulphate in solution (as SO =	250	250	mg/
7. Sulphide, hydrosulphides (as S=) and polysulphides	1	1	mg/
8. Chlorides (as C-)	1 000	500	mg/
9. Fluoride (as F-)	5	5	mg/
10. Phenols (as phenol)	10	5	mg/
11. Cyanides (as CN-)	20	10	mg/
12. Settleable solids	Charge	Charge	mg/
13. Suspended solids	2 000	1 000	mg/
14. Total dissolved solids	1 000	5000	mg/

15. Electrical conductivity	-	400	Ms/m
16. Anionic surfactants	-	500	mg/
17. C.O.D.	Charge	Charge	mg/
Heavy Metal Limits			
18. Copper (as Cu)	50	5	mg/
19. Nickel (Ni)	50	5	mg/
Zinc (Zn)	50	5	mg/
21. Iron(Fe)	50	5	mg/
22. Boron (B)	50	5	mg/
23. Selenium (Se)	50	5	mg/
24. Manganese (Mn)	50	5	mg/
25. Lead (Pb)	20	5	mg/
26. Cadmium (Cd)	20	5	mg/
27. Mercury (Hg)	1	1	mg/
28. Total Chrome (Cr)	20	5	mg/
29. Arsenic (As)	20	5	mg/
30. Titanium (Ti)	20	5	mg/
31. Cobalt (Co)	20	5	mg/
TOTAL METALS	100	20	mg/

Special limitations

1. No calcium carbide, radio active waste or isotopes
2. No yeast and yeast wastes, molasses spent or unspent
3. No cyanides or related compounds capable of liberating HCN gas or cyanogen
4. No degreasing solvents, petroleum spirit, volatile flammable solvents or any substance which yields a flammable vapor at 21 C

PART B

Acceptance of industrial effluent for discharge into sea outfalls

No industrial effluent shall be accepted for discharge into the sea outfall unless it complies with the following conditions. The industrial effluent shall not contain concentrations of substances in excess of those stated below-

SEA OUTFALL QUALITY LIMIT		UNIT
1. Temperature	44	C
2. Ph	5,5 < pH < 9,5	
3. Settleable solids	2	m/
4. Oils, greases and waxes of mineral origin	50	mg/
5. Arsenic (expressed as As)	5	mg/
6. Cadmium (expressed as Cd)	1,5	mg/
7. Total chromium (expressed as Cr)	3	mg/
8. Copper (expressed as Cu)	3	mg/
9. Lead (expressed as Pb)	5	mg/
10. Mercury (expressed as Hg)	0,05	mg/
11. Cyanides (expressed as CN)	10	mg/
12. Nickel (expressed as Ni)	10	mg/
13. Zinc (expressed as Zn)	20	mg/
14. Sulphide (expressed as S=)	1	mg/
15. Sulphates in solution (expressed as SO=4)	250	mg/

SCHEDULE 2VALUES

Parameter	Allowed Specification
PV-not exceed	1400 ml/l
Ph within range	6,0-10,0
Electrical conductivity - not greater than	500 m S / m at 20 °C

Caustic alkalinity (expressed as CaCO ₃)	2 000 mg / l
Substance not in solution (including fat, oil, grease waxes and like substances)	2 000 mg / l
Substances soluble in petroleum ether	500 mg / l
Sulphides, hydro-sulphides and polysulphides (expressed as S)	50 mg / l
Substances from which hydrogen cyanide can be liberated in the sewage drainage installation, sewer or sewage treatment works (expressed as HCN)	20 mg / l
Formaldehyde (expressed as HCHO)	50 mg / l
Non - organic solids in suspension	100 mg / l
Chemical oxygen demand (CO)	5 000 mg / l
All sugars and / or starch (expressed as glucose)	1 500 mg / l
Available chlorine (expressed as Cl)	100 mg / l
Sulphates (expressed as SO ₄)	1 800 mg / l
Fluorine - containing compounds (expressed as F)	5 mg / l
Anionic surface active agents	500 mg / l

METALS:

Group 1:

Metal	Expressed as
Manganese	Mn
Chromium	Cr
Copper	Cu
Nickel	Ni
Zinc	Zn
Iron	Fe
Silver	Ag

Cobalt	Co
Tungsten	W
Titanium	Ti
Cadmium	Cd

The total collective concentration of all metals in Group 1 (expressed as indicated above) in any sample of the effluent, shall not exceed 50 mg/l, nor shall the concentration of any individual metal In a sample exceed 20 mg/l.

Group 2:

Metal	Expressed as
Lead	Pb
Selenium	Se
Mercury	Hg

The total collective concentration of all metals in Group 2 (expressed as indicated above) in any sample of the effluent shall not exceed 10 mg/l, nor shall the concentration of any individual metal in any sample exceed 5 mg/l.

OTHER ELEMENTS

Element	Expressed as
Arsenic	As
Boron	B

The total collective concentration of all elements (expressed as indicated above) in any sample of the effluent shall not exceed 20 mg / l.

RADIO-ACTIVE WASTES

Radio-active wastes or isotopes: Such concentration as may be laid down by the Atomic Energy Board or any national or Department:

Provided that, notwithstanding the requirements set out in this Part, the Municipality reserves the right to limit the total mass of any substance or impurity discharged per 24 hours into the sanitation system from any premises.

METHOD OF TESTING:

The method of testing in order to ascertain the concentration of any substance in this Schedule, shall be the test normally used by the Municipality for these purposes. Any person discharging any substance referred to in this Schedule shall ascertain the details of the appropriate test from the Municipality.

**SCHEDULE 3
APPLICATION FORM FOR THE DISCHARGE OF INDUSTRIAL EFFLUENT TO THE
MUNICIPALITY'S SANITATION SYSTEM**

(Please complete application in block capitals)

I (name): the undersigned,

duly authorised to set on behalf of and hereinafter referred to as the applicant, hereby apply in terms of the Water Services Bylaws of the Municipality for approval to discharge industrial effluent into the Municipality's sanitation system in accordance with the information provided herein.

PART I

1. NATURE OF THE BUSINESS OR INDUSTRY CONCERNED:
2. NAME OR STYLE UNDER WHICH THE BUSINESS OR INDUSTRY IS CONDUCTED:
3. POSTAL ADDRESS OF THE BUSINESS OR INDUSTRY:
4. PHYSICAL STREET ADDRESS:

ERF NO OR FARM PTN: TOWNSHIP OR FARM:

5. If the business or industry is conducted by a company or closed corporation, state the name of the secretary, and if it is a partnership state the names of the partners:
6. IS THIS A NEW OR ESTABLISHED BUSINESS:
7. DESCRIPTION OF INDUSTRIAL OR TRADE PROCESS BY WHICH THE EFFLUENT WILL BE PRODUCED:
8. INFORMATION RELATING TO EMPLOYEES-

	Office	Factory
Total number of daily employees (not included in (4)):		
2. Number of shifts worked per day:		
3. Number of days worked per week :		
4. Number of persons resident on the premises:		
5. Is a canteen provided? :		

PART II

INFORMATION RELATING TO THE CONSUMPTION OF WATER

1. TOTAL NUMBER OF LITRES OF WATER CONSUMED IN SIX MONTHS-

	Meter No	Meter No	Meter No	Total
Water purchased from the Municipality				
Water from borehole or other source				

Water entering with raw materials				
Section of plant served by meter				
Total A				

2. WATER CONSUMPTION

1. Industrial kl/ Month

- (i) Quantity of water in product
 - (ii) Quantity of water lost by evaporation
 - (iii) Quantity of water used as boiler make-up
2. Quantity of water for other uses (e.g. cooling, gardens, etc...)

TOTAL B

3. Domestic use kl/ Month

- (i) Total number of employees (Allow 1 kilolitre/person/month)
- (ii) Total number of employees permanently resident on the premises e.g. hostels(Allow1 kilolitre/person/month)

TOTAL C

4. EFFLUENT DISCHARGE INTO SANITATION SYSTEM

- 1. Metered volume (if known) kl/ Month
- 2. Estimated un-metered volume (see below*) kl/ Month
- 3. Estimated rate of discharge
- 4. Period of maximum discharge (eg. 07:00 to 08:00)

* In the event that no effluent meter is installed on the premises, the estimated volume of un-metered effluent discharge to sewer is calculated as follows:

A - (B + C) = Kilolitre /Month

PART III

INFORMATION REGARDING THE COMPOSITION OF INDUSTRIAL EFFLUENT

Information relating to the chemical and physical characteristics of the effluent to be discharged-

- 1. Maximum temperature of effluent °C

2. pH value Ph
3. Nature and amount of settleable solids
4. Organic Content (Expressed as Chemical Oxygen Demand)
5. Maximum total daily discharge (kilolitres)
6. Maximum rate of discharge (kilolitres / hr)
7. Periods of maximum discharge, (e.g. 7:00 am to 8:00 am)
8. If any of the substances or their salts, specified in the table, are formed on the premises, a cross must be placed in the space in which the substance appears, and, if possible, the average *concentration of this substance likely to be present in any effluent must also be stated.*

ELEMENTS		COMPOUNDS		OTHER SUBSTANCES	
Arsenic	mg/l	Ammonium	mg/l	Grease and / or oil	mg/l
Boron	mg/l	Nitrate	mg/l	Starch and / or sugars	mg/l
Cadmium	mg/l	Sulphide	mg/l	Synthetic detergents	mg/l
Chromium	mg/l	Sulphate	mg/l	Tar and / or tar oils	mg/l
Cobalt	mg/l	Others (Specify)	mg/l	Volatile Solvents	mg/l

Copper	mg/l
Others (Specify)	mg/l
Cyanide	mg/l
Iron	mg/l
Lead	mg/l
Manganese	mg/l
Mercury	mg/l
Nickel	mg/l
Selenium	mg/l
Tungsten	mg/l
Titanium	mg/l
Zinc	mg/l
Other (Specify)	mg/l

9. Any further information as to kind or character, chemical compositions, concentrations or other properties peculiar to the industrial effluent to be furnished on a separate sheet and attached hereto.

PART IV
CONDITIONS RELATING TO THE ACCEPTANCE OF INDUSTRIAL EFFLUENT

1. The applicant shall attach descriptions and a statement of the dimensions of grease and oil traps, screens, dilution and neutralising tanks and any other provision made for the treatment of the effluent prior to discharge to the sanitation system.
2. The applicant shall submit to the Municipality, if requested, plans showing the reticulation systems on his premises for water and industrial effluent.
3. The applicant shall, in addition to complying with the provisions of the Municipality's Water Services Bylaws aimed at the protection of its employees, sewers and treatment plant from damage, comply with any direction concerned with such protection given by the Engineer verbally or in writing for the purpose of ensuring the applicant's compliance with the said bylaws.
4. The applicant shall notify the Municipality, as soon as possible after he becomes aware thereof, or at least 14 days before anything is done to cause material alteration in the nature or quantity of the industrial effluent specified in this application or in any of the facts stated by him therein.
5. The applicant shall, within 30 days from the date of signature of this application, procure an accurately representative sample of not less than 5 litre of the industrial effluent to be discharged into the sewer, which sample shall be free of domestic sewage, and shall submit one half thereof to the Municipality for analysis and also submit to the Engineer a report on the sample made by an analyst appointed by him: Provided that in the case of a newly established industry the period specified may be extended by the Municipality for a period not exceeding six months or such further extended periods as the Municipality in its discretion may approve.
6. The applicant hereby declares and warrants that the information given by him in this form, or otherwise, in connection with this application is, to the best of his knowledge and belief, in all respects correct.
7. The applicant agrees that the said information, being in all respects correct, shall form the basis on which this application is granted by the Municipality.

Thus done at by the applicant this day of 20 Signature and capacity of the applicant.

SCHEDULE 4
FORMULA FOR THE CALCULATION OF EFFLUENT DISCHARGE CHARGES

The additional charge for industrial effluent for the disposal of high strength sewage to a waste water treatment plant shall be determined in accordance with the following formula-

$$T_c = Q_c t \left[a \left(\frac{COD_c - COD_d}{COD_d} \right) + b \left(\frac{P_c - P_d}{P_d} \right) + c \left(\frac{N_c - N_d}{N_d} \right) \right]$$

Where

- $T_c Q_c$ = Waste water Volume discharged by consumer in kl
- $t \text{ COD}_c$ = Unit Treatment cost of waste water in R/kl
- COD_d = Total COD of waste water discharged by consumer in milligrams/litre and is inclusive of both the biodegradable and non-biodegradable portion of the COD
- P_c = Total COD of domestic waste water in milligrams per litre
- $P_d N_c$ = Ortho-phosphate concentration of waste water discharged by consumer in milligram phosphorus per litre
- $a b$ = Ortho-phosphate concentration of domestic waste water in milligrams phosphorus per litre
- $a b$ = Ammonia concentration of waste water discharged by consumer in milligrams of nitrogen per litre
- $a b$ = Ammonia concentration of domestic waste water in milligrams of nitrogen per litre
- $a b$ = Portion of the costs directly related to COD
- $a b$ = Portion of the costs directly related to the removal of phosphates
- $a b$ = Portion of the costs directly related to the removal of nitrates

Different Terms	Values
T	R0.82/kl
COD	d 600 mg/l
10 mg/INd	25 mg/l
A	0.6
B	0.25
C	0.015