

WATER SUPPLY

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DURBAN TRANSITIONAL METROPOLITAN COUNCIL DURBAN METROPOLITAN WATER SUPPLY BY-LAWS

The Durban Transitional Metropolitan Council, acting under the authority of section 268 of the Local Authorities Ordinance, No. 25 of 1974 hereby publishes the following Water Supply By-laws made by the Durban Transitional Metropolitan Council at its meeting held on 22 May 1996 which By-laws shall come into effect on the date of publication thereof.

E. W. H. MORTON
Acting Chief Executive Officer

CHAPTER 1 GENERAL PROVISIONS

1/1. Definitions.—For the purpose of these By-laws, unless the context otherwise indicates—

“**approved**” means approved by the **authorised delegate**;

“**authorised delegate**” means any person authorised by the **Council** to exercise any right or carry out any duty or function under these By-laws;

“**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;

“**capacity**” of a **storage tank** means the volume of the tank between the **operating water level** of the water contained in such tank and the invert of the outlet from the tank;

“**combined installation**” means a **water installation** used for fire fighting and **domestic, commercial** or **industrial purposes**;

“**commercial purposes**” in relation to the supply of water means water supplied to **premises** which are used for the carrying on of a business or trade;

“**communication pipe**” means a pipe which is vested in the **Council** and installed by it for the purpose of conveying water from a **main** to a **water installation**;

“**Constitution**” The Constitution of the Republic of South Africa (Act 200 of 1993);

“**consumer**” means a person who is obtaining a supply of water from the **Council**;

“**Council**” means the Durban Transitional Metropolitan Council;

“**domestic purposes**” in relation to the supply of water means water supplied for drinking,

ablution and culinary purposes to **premises** used solely for residential purposes;

“**fire installation**” means a **water installation** which conveys water solely for the purpose of fire fighting;

“**general installation**” means a **water installation** which conveys water for **domestic, commercial or industrial purposes**;

“**industrial purposes**” in relation to the supply of water means water supplied to any **premises** which constitute a factory as defined under the Occupational Health and Safety Act, (Act 85 of 1993);

“**installation work**” means work in respect of the construction of, or carried out on, a **water installation**;

“**local authority**” means any local government as contemplated under the **Constitution** or any other **local authority** as contemplated in the Local Government Transition Act (Act 209 of 1993) and includes any organ of state within the meaning of the **Constitution** with powers similar to that of any regional water services corporation constituted under the Water Services Ordinance, 1963 (Ordinance No 27 of 1963) or any Water Board within the meaning of the Water Act, 1956 (Act 54 of 1956);

“**main**” means a pipe, other than a **communication pipe**, vesting in the **Council** and used by it for the purpose of conveying water to **consumers**;

“**occupier**” means a person in actual occupation of any **premises** or part thereof, without regard to the title under which he occupies;

“**officer**” means any employee of the **Council** or any other person who is authorised to perform any act, function or duty in terms of or exercise any power under these By-laws;

“**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 in whom from time to time is vested the legal title to **premises**;
- (b) in a case where the person in whom the legal title is vested is insolvent or dead, or is under any form of legal disability whatsoever, the person in whom the administration and control of his property is vested as curator, trustee, executor, administrator, judicial manager, liquidator or other legal representative;
- (c) in any case where the **Council** is unable to determine the identity of such person, a person who is entitled to the benefit of the use of the **premises** or a building or buildings thereon;
- (d) in a case where such **premises** has been leased for a period of 30 years or longer, the lessee thereof;
- (e) in relation to—
 - (i) a piece of land delineated on a sectional plan registered in terms of the Sectional Titles Act, 1986 (Act 95 of 1986), the developer or the body corporate in respect of the common property; or

- (ii) a section as defined in such Act, the person in whose name such section is registered under a sectional title deed, and includes the lawfully appointed agent of such a person;

“**pollution**” means the introduction into the **water supply system**, or a **water installation**, of any substance which can make the water harmful to health, or impair its quality;

“**premises**” means any piece of land the external surface boundaries of which are delineated on—

- (a) a general plan or diagram registered in terms of the Land Survey Act, 1927 (Act 9 of 1927) or in terms of the Deeds Registries Act, 1937 (Act 47 of 1937); or
- (b) a sectional plan registered in terms of the Sectional Titles Act, 1986 (Act 95 of 1986),

“**prescribed**” means **prescribed** by the **authorised delegate**;

“**prescribed charge**” means a charge **prescribed** by the **Council**;

“**registered contractor**” means a person who is registered with the **Council** in terms of section IV/2;

“**responsible plumber**” means a person who is registered with the **Council** in terms of section IV/3;

(Editorial Note: Wording as per original *Provincial Gazette*. It is suggested that the word “responsible” is intended to be “responsible”.)

“**service pipe**” means a pipe which is part of a **water installation** and which connects with the **communication pipe**;

“**storage tank**” means a tank forming part of a **water installation** and used for the storage of water, other than a cistern serving a water-closet pan or a urinal and a tank used for the storage of hot water;

“**terminal water fitting**” means a **water fitting** at an outlet of a **water installation** which controls the discharge of water from a **water installation**;

“**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 vested 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 **communication pipe** relating to such **premises** or is otherwise laid with the permission of the **Council**;

“**water supply system**” means the structures, aqueduct, pipes, valves, pumps, meters or other appurtenances relating thereto which are vested in the **Council** and are used or intended to be used by it in connection with the supply of water, and includes any part of the system;

“**working day**” means a day other than Saturday, Sunday or a public holiday.

I/2. Exceptions to Applications of these By-laws.—(1) If authority was given before the date of commencement of these By-laws for **installation work** to be done, or if authorised work is in progress on such date, such work shall comply with any laws

governing such work which were in force in the area of jurisdiction of the **Council** prior to such date.

(2) The **authorised delegate** may, for a period of 90 days after the commencement of these By-laws, give authority for **installation work** to be done in accordance with any laws governing such work which were in force in the area of jurisdiction of the **Council** prior to such date.

I/3. Responsibility for Compliance with these By-laws.—It is the responsibility of the **owner** of the **premises** to comply, with the provisions of these By-laws in respect of the **water installation**, and the **consumers** in respect of the use of the water on the **premises**.

I/4. Existing water installation.—No **owner** shall be required to comply with these By-laws by altering a **water installation** or a part thereof which was installed in conformity with every law applicable immediately before the date of commencement of these By-laws: Provided that if, in the opinion of the **authorised delegate**, the installation or a part thereof is so defective or in such a condition or position as to cause, or be likely to cause, waste or undue consumption of water, **pollution, pollution** of the water supply, or a health or safety hazard, the **authorised delegate** may by notice in writing require the **owner** to comply with the provisions of these By-laws within a specified period.

I/5. Notices and Documents.—(1) A notice or document issued by the **Council** in terms of these By-laws shall be deemed to be duly issued if it is signed by an **officer**.

(2) If a notice or document is to be served on a person in terms of these By-laws such service shall be effected—

- (a) by delivering it to him personally or to his duly authorised agent;
- (b) by delivering it at his residence or place of business or employment to a person apparently not less than 16 years of age and apparently residing or employed there;
- (c) if he has nominated a *domicilium citandi*, by delivering it to such domicilium;
- (d) if he has not nominated a *domicilium citandi*, by delivering it to the address given by him in his application for a supply of water, for the reception of an account for water supplied;
- (e) in the case of a body corporate, by delivering it at the registered office or business **premises** of such body corporate;
- (f) by registered or certified post addressed to his last known address; or
- (g) if service cannot be effected in terms of paragraphs (a) to (f) by affixing it to a principal door of entry to the **premises** concerned.

I/6. Power to Serve, and Compliance with Notices.—(1) The **authorised delegate** may by written notice order a person who by act or commission commits a breach of these By-laws or any condition imposed thereunder to remedy such breach within a period specified in the notice;

(2) If a person fails to comply with a written notice served on him by the **authorised delegate** in terms of these By-laws within the specified period the **authorised delegate** may take such action or do such work as in his opinion is necessary to ensure compliance, and recover the cost of such action or work from the person.

I/7. False Statements or Information.—No person shall make a false statement or furnish false information to the **Council** or an **officer**, or falsify a document issued in terms of these By-laws.

I/8. Trespassing on water supply system.—No person shall, without the prior written permission of the **authorised delegate**, enter

- (a) upon an area enclosed by a fence or where entry is prohibited by notice boards; or
- (b) a structure used by the **Council** in connection with its **water supply system**.

I/9. Interference with water supply system.—(1) No person other than an **officer** shall interfere or tamper with the **water supply system**, except as provided in section II/20.

(2) No person other than an **officer** shall make a connection to the **water supply system** save as contemplated in section II/8 (2).

I/10. Damage to water supply system.—(1) No person shall damage or endanger the **water supply system**, or cause or permit it to be damaged or endangered.

(2) Any person who intends performing work which may cause damage to the **water supply system** on land owned by or vested in the **Council** or over which it has a servitude or other right, shall prior to commencement of such work, ascertain from the **authorised delegate** if any part of the **water supply system** is situated on the land.

(3) If work which in the opinion of the **authorised delegate** could damage or endanger the **water supply system** is to be performed or is being performed on land referred to in subsection (2), or on land adjacent thereto, he may by notice in writing require the person concerned not to commence, or to cease performing, the work until such time as he has complied with the conditions specified in the notice.

I/11. Obstruction of Access to water supply system.—(1) No person shall prevent or restrict access to the **water supply system**.

(2) If a person contravenes subsection (1), the **authorised delegate** may—

- (a) by written notice require the person to restore access at his own cost within a specified period; or
- (b) if he is of the opinion that the situation is a matter of urgency, without prior notice restore access and recover the cost from the person.

I/12. Pollution of Council's Water Supply.—(1) Unless such act is specifically authorised in writing by the **authorised delegate**, no person shall commit an act which may cause **pollution** of any nature to water in a reservoir or other place owned, controlled by or vested in the **Council** either in whole or in part, and used by it in connection with the supply of water.

(2) No person shall, except at such places as are designated by notice boards or in such receptacles as are provided by the **Council** 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 relating to the **Council's** water supply which has been designated by notice boards as being an area where such acts are prohibited.

(3) If a person contravenes subsection (1) or (2) the **authorised delegate** may—

- (a) by notice in writing require the person immediately to cease such act, and take specified action within a specified period; or
- (b) if he is of the opinion that the situation is a matter of urgency, without prior notice take such action as he may deem necessary and recover the cost from the person.

I/13. Power of Entry and Inspection.—(1) An **officer** may for any purpose connected with the implementation or enforcement of these By-laws, at all reasonable

times or in an emergency at any time, enter **premises**, request information and make such inspection, examination and enquiry as he may deem necessary, and for those purposes operate any component of the **water installation**.

(2) If the **authorised delegate** considers it necessary that work be performed to enable an **officer** properly and effectively to implement a function referred to in subsection (1), he may—

- (a) by written notice require the **owner** or **occupier** of the **premises** at his own cost to do specified work within a specified period; or
- (b) if in his opinion the situation is a matter of urgency, without prior notice do such work or cause it to be done, at the cost of the **owner**.

(3) If the work referred to in subsection (2) is carried out for the sole purpose of establishing whether a contravention of these By-laws has been committed and no such contravention is established, the **Council** shall bear the expense connected therewith together with that of restoring the **premises** to its former condition, but it shall not otherwise bear such expense.

(4) If an **officer** requires the presence of—

- (a) an **owner** at an inspection of his **water installation**;
- (b) a **registered contractor** doing **installation work** at an inspection of such work; or
- (c) a **registered contractor's responsible plumber** at an inspection of work being done under his control,

he may give such person written notice of not less than 2 **working days** to that effect, indicating the date and time when, and the place where, he proposes to carry out the inspection.

I/14. Pipes in Streets or Public Places.—No person shall 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 the **Council**, except with the prior written permission of the **authorised delegate** and subject to such conditions as he may impose.

I/15. Offences.—(1) A person who—

- (a) fails or refuses to give access required by an **officer** in terms of section I/13;
- (b) obstructs or hinders an **officer** in the exercise of his powers or functions or the performance of his duties under these By-laws;
- (c) fails or refuses to give an **officer** such information as he reasonably may require for the purpose of the exercise of his powers or functions or the performance of his duties under these By-laws or who gives such **officer** false or misleading information knowing it to be false or misleading;
- (d) contravenes or fails to comply with a provision of these By-laws;
- (e) fails to comply with a condition or prohibition imposed in terms of these By-laws;
- (f) fails to comply with the terms of a notice served upon him in terms of these By-laws; or
- (g) fails to comply with a request made in terms of section IV/4 (4) (b)

shall be guilty of an offence and liable, upon conviction to the maximum penalty **prescribed** for the offence by section 266 (7) (a) of the Local Authorities Ordinance, 1974 (Ordinance 25 of 1974).

(2) A person who causes or incites another person to commit an offence referred to in subsection (1), or who being in a position of authority over another person permits or allows him to commit an offence, shall himself be guilty of that offence.

I/16. Liabilities and Compensation.—The **Council** shall not be liable for damages or compensation arising from anything done by it in terms of these By-laws.

I/17. Relaxation of Waiver.—The **Council** may, in an individual case, relax or waive the requirements of a provision of these By-laws upon such conditions as it deems fit to impose if it is of the opinion that the application or operation of that provision in that case would be so unreasonable as to cause substantial prejudice of a nature or degree which was not intended to flow from the enactment of the provision and if it is of the opinion either that—

- (a) the purpose for which the provision has been enacted has substantially been attained in that case or will be so attained upon compliance with the conditions imposed; or that
- (b) the need to attain that purpose is for any reason absent in that case.

CHAPTER II

PROVISIONS RELATING TO THE SUPPLY OF WATER BY THE COUNCIL

II/1. Unauthorised Use of Water.—Subject to the provisions of section II/2, no person shall take water from the **water supply system** except through a **communication pipe** provided in terms of section II/8 or from a hydrant in terms of section II/20.

II/2. Application for a Supply of Water.—(1) No person shall take, or be supplied with, water from the **water supply system** unless he has made application to the **Council** on the **prescribed** form for a supply of water, and such application has been granted.

(2) The **prescribed** form referred to in subsection (1) may contain such conditions as the **Council** deems fit.

(3) An application granted by the **Council** shall constitute an agreement between it and the applicant, and such agreement shall take effect on the date referred to or stipulated therein.

(4) A **consumer** shall be liable for all the **prescribed** charges in respect of a supply of water granted to him until the agreement referred to in subsection (3) has been terminated in terms of section II/5.

II/3. Special Agreements for Supply of Water.—(1) The **Council** may enter into a special agreement for the supply of water to—

- (a) an applicant inside its area of jurisdiction, if the supply necessitates the imposition of conditions not contained in the **prescribed** form referred to in section II/2; or
- (b) an applicant outside its area of jurisdiction.

(2) If the **Council**, in terms of a special agreement, provides a supply of water to an applicant outside its area of jurisdiction it may permit him to sell such water to other persons outside its area of jurisdiction, subject to such conditions as it deems fit.

II/4. Purpose of Supply.—Water supplied by the **Council** shall be used solely for the purpose specified in the agreement for a supply of water.

II/5. Termination of Agreement for Supply of Water.—(1) A **consumer** may terminate an agreement referred to in section II/2 by giving to the **Council** not less than five **working** days notice in writing of his intention to do so.

(2) The **authorised delegate** may, by notice in writing of not less than five **working days**, advise a **consumer** of his intention to terminate his agreement for supply of water if—

- (a) he has not consumed any water during the preceeding six months and has not made arrangements satisfactory to the **authorised delegate** for the continuation of his agreement;
- (b) he has committed a breach of these By-laws and has failed to rectify such breach;
- (c) the **Council** cannot continue to supply him with water; or
- (d) in terms of an agreement with another **local authority** supplying water, such authority shall supply water to the **consumer**.

(3) The **Council** may, without notice terminate an agreement for supply if a **consumer** has vacated the **premises** to which such agreement relates.

II/6. Provision of Surety.—(1) The **authorised delegate** may require an applicant to deposit with him a sum of money representing the cost of the quantity of water which in his opinion would be supplied to the **consumer** during a period specified by the **Council**;

Provided that the **authorised delegate** may on written application by a **consumer** accept from him a guarantee to his satisfaction in lieu of the sum of money.

(2) A deposit or guarantee contemplated in subsection (1) shall accompany an application submitted in terms of section II/2 (1).

(3) A deposit paid, or a guarantee provided in terms of subsection (1) shall not be regarded as being in payment of a current account due for the supply of water.

(4) (a) If the **authorised delegate** at any time is of the opinion that a deposit or guarantee is insufficient for the purpose of subsection (1), he may by notice in writing require the **consumer** concerned to increase such deposit or guarantee by an amount specified in such notice.

- (b) If a **consumer** fails to comply with the notice referred to in paragraph (a) within thirty days of the issue thereof, the **authorised delegate** may reduce or discontinue his supply, until such time as he complies with the notice.

(5) The **authorised delegate** may, of his own accord or at the request of a **consumer**, reduce the amount of a deposit or a guarantee required by him if he is satisfied that the reduction is justified by the present supply of water to the **consumer** or a change of the circumstances pertaining to the assessment of the original amount of the deposit or guarantee.

(6) If, on the termination of an agreement in terms of section II/5, any amount is outstanding in respect of the supply of water to a **consumer**, the **authorised delegate** may—

- (a) apply the deposit in payment or part payment of the amount and refund any balance to the **consumer**; or
- (b) recover the amount in terms of the guarantee.

(7) An agreement referred to in Section II/2 (3) or II/3 may contain a condition that after it has been terminated, a deposit shall become forfeited to the Council if it has not been claimed within 12 months of the termination.

II/7. Provision of Communication Pipe.—(1) If an application for a supply of water in respect of **premises** has been granted and no **communication pipe** exists in respect of the **premises**, the **owner** shall make application on the **prescribed** form and pay the **prescribed** charge, for the installation of such a pipe.

(2) If an application is made for a supply of water to **premises** which is so situated that it is necessary to extend the **water supply system** in order to supply water to the **premises**, the **authorised delegate** may agree to the extension subject to conditions as he may impose.

II/8. Communication Pipes.—(1) A **communication pipe** provided and installed by the **Council** shall—

- (a) be located in a position determined by the **authorised delegate**;
- (b) terminate at a point between 140 and 160 millimetres inside the boundary of the land owned by or vested in the **Council**, over which it has a servitude or other right;
- (c) be of a size requested by the applicant if agreed to by the **authorised delegate**.

(2) (a) The **owner** shall, at his own cost, effect the connection between his **water installation** and the **communication pipe** serving his **premises**, unless otherwise stipulated by the **authorised delegate**.

- (b) The **authorised delegate** may specify—
 - (i) the type of joint which shall be used to effect the connection referred to in paragraph (a); and
 - (ii) the material of which the portion of the **service pipe** between its **communication pipe** and the **owner's** isolating valve is made, and the method of installation of such portion.
- (c) The **owner** shall secure the portion of his **service pipe** referred to in paragraph (b) (ii) against movement.

(3) The number of **communication pipes** which are to serve a **water installation** shall be determined by the **authorised delegate**, and the installation shall be connected only to the **communication pipe** or pipes provided for it:

Provided that if two or more parts of **water installation** are served by separate **communication pipes**, the parts shall not be interconnected without the prior written permission of the **authorised delegate** and subject to such conditions as he may impose.

(4) No **water installation** shall be supplied with water through a **communication pipe** which was installed to provide water for building construction purposes until the certificate of compliance has been received by the **authorised delegate**.

(5) If the **authorised delegate** considers that the size of an existing **communication pipe** is unsuitable by reason of the quantity of water supplied to a **consumer**, he may by written notice require the **owner** to pay the **prescribed** charges for the removal of the existing **communication pipe** and the installation of a **communication pipe** of a size acceptable to him.

(6) (a) The **authorised delegate** may, in the case of **premises** which are divided into separately occupied portions, by written notice require the **owner** at his own cost and within the period specified in the notice, to—

- (i) alter the **water installation** serving any one portion so that it is separate from, and independent of, the **water installation** serving any other portion;
- (ii) make application in terms of section II/7 for a **communication pipe** to serve each portion; and

(iii) connect the **water installation** referred to in paragraph (i) to the **communication pipe** referred to in paragraph (ii).

(b) The **authorised delegate** may give the **occupier** of the portion referred to in paragraph (a) (i) notice in writing that he is required to make application in terms of section II/2 for a supply of water.

(7) If the **authorised delegate** intends to replace a **communication pipe**, he shall give the **owner** concerned not less than ten **working days** notice in writing of the date after which the **owner** shall effect a connection between his **water installation** and the replacement **communication pipe**.

II/9. Interconnection between premises.—An **owner** of **premises** shall ensure that no interconnection exists between the **water installation** on his **premises** and the **water installation** on other **premises**, unless he has obtained the prior written consent of the **authorised delegate** and has complied with any conditions he may have imposed.

II/10. General Conditions of Supply.—(1) The granting of a supply of water by the **Council** shall 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.

(2) The **authorised delegate** may specify the maximum height to which water may be supplied from the **water supply system**.

(3) If an **owner** requires the maintenance of any of the conditions referred to in subsection (1) on his **premises**, he shall make provision in his installation for such requirement.

(4) The **authorised delegate** may interrupt the supply of water to a **premises** without prior notice.

(5) If, in the opinion of the **authorised delegate** the consumption of water by a **consumer** adversely affects the supply of water to another **consumer**, he may apply such restrictions as he deems fit to the supply of water to the first mentioned **consumer** in order to ensure a reasonable supply of water to the other **consumer**.

II/11. Cutting-off or Restricting of Supply.—(1) Without prejudice to any other right it may have, the **Council** may, if a **consumer** has—

- (a) failed to pay a sum due to it in terms of these By-laws; or
- (b) committed a breach of these By-laws and has failed to rectify such breach within the period specified in a written notice served on him requiring him to do so;

by written notice inform him of its intention to cut off or restrict his supply of water on a specified date and it may on or after that date so cut off or restrict such supply.

(2) If in the opinion of the **authorised delegate** such action is necessary as a matter of urgency to prevent waste of water, damage to property, danger to life or **pollution** of water, it may—

- (a) without prior notice, cut off the supply of water to a **premises**; and
- (b) enter upon such **premises** and do such emergency work at the **owner's** expense as it deems necessary, and in addition by written notice require the **owner** to do such further work as it may deem necessary, within a specified period.

(3) The **consumer** shall pay—

- (a) the **prescribed charge** for the cutting-off or restricting of his supply in terms of subsection (1) or (2); and
- (b) the **prescribed charge** for restoration of the water supply;

Provided that, in the case of a cutting off or restriction in terms of subsection (1), both the **prescribed charges** required in terms of subsection (a) and (b) above must be paid prior to the restoration of the water supply.

II/12. Interruption of Supply at consumer's Request.—(1) The **authorised delegate** may, at the written request of a **consumer**—

- (a) turn off the supply of water to his **premises**; and
- (b) reinstate the supply,

on the dates requested by him.

(2) The **consumer** shall prior to the reinstatement of his water supply pay the **prescribed charge** for the turning-off of his supply of water, and for its reinstatement.

II/13. Disconnection of Water Supply.—The **authorised delegate** may disconnect a **water installation** from the **communication pipe** and remove the **communication pipe** if—

- (a) the agreement for supply has been terminated in terms of section II/5 and he 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.

II/14. Metering of Supplies.—(1) All water supplied to a **consumer** by the **Council** shall pass through a meter for the purpose of measuring the quantity of the water: Provided that the **authorised delegate** may dispense with the use of a meter in the case of—

- (a) an automatic sprinkler installation;
- (b) a **fire installation** in respect of which steps have been taken to detect unauthorised draw-off of water for purposes other than fire fighting; and
- (c) special circumstances at the **authorised delegate's** discretion.

(2) A meter referred to in subsection (1), and its associated apparatus shall be provided and installed by the **Council**, shall remain its property, and may be changed by it when it deems necessary.

(3) (a) The **Council** may install the meter, and its associated apparatus, serving a **water installation** at any point in the installation.

- (b) If the **Council** installs a meter in a **water installation** in terms of paragraph (a), it may install a section of pipe and associated fittings between the end of its **communication pipe** and the meter, and such section shall be deemed to form part of the **water installation**.

(4) If the **Council** installs a meter together with its associated apparatus in a **water installation** in terms of subsection (3) the **owner** shall—

- (a) provide a place satisfactory to the **authorised delegate** in which to install it;
- (b) ensure that unrestricted access is available to it at all times;
- (c) be responsible for its protection and be liable for the costs arising from damage thereto;

- (d) ensure that no connection is made to the pipe in which the meter is installed, between the meter and the **communication pipe** serving the installation; and
- (e) make provision for the drainage of water which may be discharged from the pipe in which the meter is installed, in the course of work done by the **Council** on the meter.

(5) No person other than an **officer** shall—

- (a) disconnect a meter and its associated apparatus from the pipe in which they are installed;
- (b) break a seal which the **Council** has placed on a meter; and
- (c) in any other way interfere with a meter and its associated apparatus.

(6) If the **authorised delegate** considers that the size of a meter is unsuitable by reason of the quantity of water supplied to **premises**, it may install a meter of such size as it deems necessary, and may recover from the **owner** of the **premises** concerned, the **prescribed charge** for the installation of the meter.

II/15. Quantity of Water Supplied to a consumer.—(1) For the purpose of assessing the quantity of water supplied through a meter to a **consumer** over a specified period, it shall be deemed, unless the contrary can be proved, that—

- (a) such quantity is represented by the difference between readings of the meter taken at the beginning and end of the period;
- (b) the meter was registered correctly during the period; and
- (c) the entries in the records of the **Council** were correctly made;

Provided that if water is supplied to, or taken by, a **consumer** without its passing through a meter, the estimate by the **authorised delegate** of the quantity of such water shall be deemed to be correct.

(2) If a contravention of section II/14 (5) occurs, the **consumer** shall pay to the **Council** for the cost of such quantity of water as in the opinion of the **authorised delegate** was supplied to him.

II/16. Payment for Water Supplied.—(1) All water supplied by the **Council** shall be paid for by the **consumer** at the **prescribed charge** for that particular category of use for which the supply was granted.

(2) A **consumer** shall pay for all water supplied to him from the date of the agreement referred to in section II/2 until the date of termination thereof.

(3) The **authorised delegate** may estimate a quantity of water supplied in respect of a period or periods within the interval between actual successive readings of the meter and may render an account to a **consumer** for the quantity of water so estimated to have been supplied to him during each such period.

(4) The amount of an account rendered for water supplied to a **consumer** shall become due and payable on the due date stipulated in the account.

(5) If a **consumer** is dissatisfied with an account rendered for water supplied to him by the **Council** he may, prior to the date stipulated therein, object in writing to the account setting out his reasons for such dissatisfaction:

Provided that the lodging of an objection shall not entitle a **consumer** to defer payment except with the written consent of the **authorised delegate**.

(6) If a **consumer** uses water for a category of use other than that for which it is supplied by the **Council** and is in consequence not charged for water so used, or is charged for the water at a rate lower than that at which he should be charged, he shall be

liable for the amount due to the **Council** in accordance with the **prescribed charges** in respect of—

- (a) the quantity of water which in its opinion he has used and for which he has not been charged; or
- (b) the difference between the cost of the water used by him at the rate at which he has been charged and the cost of the water at the rate at which he should have been charged.

II/17. Amendments to prescribed charges for Water Supplied.—If amendments to the **prescribed charges** for water supplied become operative on a date between meter readings it shall be deemed, for the purpose of rendering an account in respect of the charges, that the same quantity of water was supplied in each period of twenty-four hours during the interval between the meter readings.

II/18. No Reduction of Amount Payable if Water Wasted or Leakage Undetected.—A **consumer** shall not under any circumstances be entitled to a reduction of the amount payable for water supplied to him.

II/19. Charges other than for Water Consumed.—Subject to the provisions of section 243 (1) of the Local Authorities Ordinance, 1974 (Ordinance 25 of 1974) the **Council** may, in addition to the **prescribed charges** for water consumed, prescribe and levy any of the following charges.

- (a) a monthly charge payable by the **owner** in respect of **premises** which in the opinion of the **authorised delegate** can reasonably be connected to the **water supply system** but is not so connected, the charge being due from a date determined by the **authorised delegate**, until the date of the agreement referred to in section II/2 (3).
- (b) a charge payable by the **consumer** in respect of each **communication pipe** or meter provided by the **Council** to serve the **premises** occupied by him, whether or not water has been supplied to him, the charge being due from the date of the agreement referred to in section II/2 (3).
- (c) a monthly charge payable by a **consumer** in respect of a minimum quantity of water, whether or not water has actually been supplied to him.

II/20. Water Supplies from Council's Hydrant.—(1) The **authorised delegate** may grant a temporary supply of water from one or more fire hydrants specified by him.

(2) A person who desires a temporary supply of water referred to in subsection (1) shall make application therefor on the **prescribed** form in terms of section II/2.

(3) Water supplied in terms of subsection (1) shall pass through a meter and the meter together with the appurtenant apparatus required to enable it to be connected to a hydrant shall be provided by the **Council** and remain its property.

(4) Before an applicant is provided with a meter in terms of subsection (3), he shall pay—

- (a) a deposit referred to in section II/6; and
- (b) a **prescribed** deposit in respect of each meter and appurtenant apparatus supplied by the **Council**, as security for their return in proper working order.

(5) If the **authorised delegate** requires that an **officer** be in control of the meter provided in terms of subsection (3), the **consumer** shall pay the **prescribed charge** for the attendance of the **officer**.

(6) If the **authorised delegate** does not require an **officer** to be in control in terms of subsection (5), a **consumer** to whom a meter and appurtenant apparatus are supplied in terms of subsection (3) shall—

- (a) be responsible for the safekeeping and the proper use thereof;
- (b) return the meter forthwith if it is damaged or becomes defective;
- (c) make the meter available for reading purposes before the seventh day of each month or at such other intervals as the **authorised delegate** may prescribe at a place designated by him; and
- (d) return the meter and apparatus to the **Council** on the termination of the agreement for supply.

(7) The **consumer** shall, in addition to paying for the water supplied to him by the **Council**, pay the **prescribed charge** for the use of a meter which is supplied to him.

(8) (a) If a **consumer** fails to comply with subsection 6 (b), (c) or (d), the **Council** may render an account to him for a quantity of water deemed by the **authorised delegate** to have been supplied to him since the last reading of the meter concerned, basing such quantity on the maximum designed rate of flow of the meter in continuous use over a period of 8 hours per day for five days per week or on such lesser rate or period as the **authorised delegate** deems appropriate.

- (b) The charge referred to in paragraph (a) shall continue to be levied until the **consumer** returns a meter and appurtenant apparatus, or notifies the **Council** in writing that he is unable to do so.
- (c) Notwithstanding the provisions of paragraph (a) and (b), if a **consumer** returns the meter in working order and with its seal intact after being charged for water in terms of paragraph (a), the **Council** shall adjust the amount charged to the cost of the water actually supplied to him.

(9) If a **consumer** to whom water is supplied in terms of subsection (1)—

- (a) takes water from a hydrant which is not specified by the **authorised delegate**;
- (b) is found to be taking, or to have taken, water from a hydrant without its passing through a meter; or
- (c) fails to comply with any provision of subsection (6),

the **Council** may forthwith terminate his agreement for supply.

II/21. Resale of Water Supplied by Council.—(1) No **consumer** who is supplied with water in terms of these By-laws shall sell such water unless provision has been made therefor in a special agreement referred to in section II/3, or he has obtained the prior written permission of the **Council** to do so.

(2) If the **Council** grants the permission referred to in subsection (1) it may stipulate the maximum price at which the water may be sold and impose such other conditions as it deems fit.

(3) Permission referred to in subsection (1) may be withdrawn at any time.

II/22. Defective Meters.—(1) If a **consumer** has reason to believe that a meter used for measuring water supplied to him by the **Council** is defective he may, against payment of the **prescribed charge**, make application on the **prescribed** form for the meter to be tested.

(2) The **prescribed charge** referred to in subsection (1) shall be—

- (a) retained by the **Council** if the meter is found in terms of subsection (3) or (4) not to be defective; or

- (b) refunded to the applicant if the meter is found in terms of those subsections to be defective.

(3) A meter to which the regulations relating to water meters published under the Trade Metrology Act, 1973 (Act 77 of 1973) are applicable, shall be deemed to be defective if, when tested in accordance with such regulations, it is found to have a percentage error in over-registration or under-registration greater than that permitted for a meter in use in terms of those regulations.

(4) A meter to which the regulations referred to in subsection (3) are not applicable, shall be deemed to be defective if, when tested at the following percentages of its designed maximum rate of flow—

- (a) not less than 75%.
- (b) between 50% and 55%; and
- (c) not more than 20%.

it is found to have a percentage error in over-registration or under-registration greater than 5% at any one of the said rates of flow.

II/23. Adjustment of Quantity of Water Supplied to a consumer through a Defective Meter.—(1) If a meter is found to be defective in terms of section II/22 (3) or (4) the **authorised delegate** may estimate the quantity of water supplied to the **consumer** concerned during the period in which, in the opinion of the **authorised delegate**, such meter was defective, on the basis of the average daily quantity of water supplied to him over—

- (a) a period between two successive meter readings subsequent to the replacement of the meter; or
- (b) a period in the previous year corresponding to the period in which the meter was defective; or
- (c) a period of three months subsequent to the replacement of the meter.

whichever the **authorised delegate** considers most appropriate.

(2) If the quantity of water supplied to a **consumer** during the period when his meter was defective cannot be estimated in terms of subsection (1), the **authorised delegate** may estimate such quantity on any basis that is available to him.

II/24. Adjustment of an Account if a Meter is Defective.—(1) The adjustment of the account of a **consumer** who has been charged for water supplied through a defective meter, shall be made over the period determined in terms of section II/23 (1).

(2) For the purpose of adjusting an account in terms of subsection (1) it shall be deemed that the same quantity of water has been supplied in each interval of twenty-four hours during the period referred to in subsection (1).

II/25. Water Restriction.—(1) Subject to the prior approval of the Minister of Local Government and Housing, the **Council** may by notice—

- (a) prohibit or restrict the consumption or use of water—
 - (i) for specified purposes or otherwise than for specified purposes;
 - (ii) during specified hours of the day or on specified days or otherwise than during specified hours of the day or on specified days; and
 - (iii) in a specified manner or otherwise than in a specifies manner;
- (b) determine and impose—
 - (i) limits on the quantity of water which may be consumed over a specified period;

- (ii) charges additional to those **prescribed** in respect of the supply of water in excess of a limit contemplated in subparagraph (1); and
 - (iii) a general surcharge on the **prescribed charges** in respect of the supply of water; and
- (c) impose restrictions or prohibitions on the use or manner of use or disposition of an appliance by means of which water is used or consumed or on the connection of such appliances to the **water installation**.

(2) The **Council** may limit the application of the provisions of a notice contemplated by subsection (1) to specified areas and classes of **consumers, premises** and activities, and provide for and permit deviations and exemptions from, and relaxation of, any of the provisions on such grounds as it deems fit.

(3) The authorised delegate may—

- (a) take, or by written notice require a **consumer** at his own cost to take, such measures including the installation of measurement devices and devices for restricting the flow of water, and measuring devices as may in his opinion be necessary to ensure compliance with a notice published in terms of subsection (1); or
- (b) cut off, or for such period as he deems fit restrict the supply of water to a **premises** in the event of a contravention of, or failure to comply with, the terms of a notice published in terms of subsection (1), on the **premises**, and where the supply has been cut off it shall only be reinstated when the **prescribed charge** for cutting off and reconnecting the supply has been paid.

(4) In addition to the person by whose act or omission a contravention of or failure to comply with the terms of a notice published in terms of subsection (1) is actually committed, the **consumer** in respect of the **premises** to which the water is supplied shall be presumed also to have committed the contravention or to have so failed to comply unless it is proved that he had taken all reasonable steps to prevent such a contravention or failure to comply by any other person:

Provided that the fact that such **consumer** issued instructions to another person shall not of itself be accepted as sufficient proof that he took all such reasonable steps.

(5) The provisions of this section shall also apply in respect of water supplied directly by the **Council** to consumers outside its area of jurisdiction, notwithstanding anything to the contrary in the conditions governing such supply, unless otherwise specified in the notice published in terms of subsection (1).

II/26. Special Metering.—(1) If the **authorised delegate** wishes, for purposes other than charging for water consumed, to ascertain the quantity of water which is used in a part of **water installation**, he may by written notice advise the **owner** concerned of his intention to install a meter at such point in his **water installation** as he may specify.

(2) The installation of a meter referred to in subsection (1), its removal, and the reinstatement of the water installation after such removal shall be carried out at the cost of the Council.

(3) The provisions of section II/14 (4) and (5) shall *mutatis mutandis* apply in respect of a meter installed in terms of subsection (1).

(Editorial Note: Wording as per original *Provincial Gazette*. It is suggested that the word “applyin” is intended to be “apply in”.)

II/27. Metering of Premises Containing Separate Occupancies.—The **authorised delegate** may require the installation, at the **owner’s** expense, of a meter to

each unit of a premises in separate occupancy for use in determining the quantity of water supplied to each such unit.

CHAPTER III APPROVAL OF INSTALLATION WORK

III/1. Approval To Be Obtained For Installation Work To Be Done.—(1) If an **owner** wishes to have **installation work** done he shall first obtain the **authorised delegate's** written approval: Provided that approval shall not be required for the repair 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) shall be made on the **prescribed** form, and shall be accompanied by—

- (a) the **prescribed charge**; and
- (b) the **prescribed** number of copies of the drawings referred to in section III/3 of the proposed work.

(3) The provisions of subsection (1) and (2), shall not apply to a **registered contractor** who replaces a fixed water heater or its associated protective devices but he shall notify the **authorised delegate** on the **prescribed** form not more than five **working days** after completing such work.

(4) Authority given in terms of subsection (1) shall, subject to section III/2, lapse after the expiry of a period of 24 months after the month succeeding the month in which the authority is given.

III/2. Extension Of Period Of Approval.—The **authorised delegate** may, on written application by the **owner** prior to the expiry of the original period concerned and subject to payment of the **prescribed charge**, from time to time extend the period of validity of approval given in terms of section III/1 for a period not exceeding 12 months at a time and subject to such conditions as he deems fit.

III/3. Drawings.—(1) Drawings submitted in terms of section III/1 (2) shall unless otherwise permitted by the **authorised delegate**—

- (a) indicate the nature and extent of the **installation work** to be done;
- (b) be on sheets not smaller than A4 size, and contain—
 - (i) the title deed description of the **premises**;
 - (ii) the name of every street on which the **premises** abuts; and
 - (iii) the scales of the drawings and the north point.

(2) The drawings referred to in subsection (1) shall indicate—

- (a) the position and size of the existing and proposed **communication pipe** serving or to serve the **premises**;
- (b) the location of every pipe, its size and the material of which it is manufactured;
- (c) the location of every **water fitting** and its description;
- (d) the location of every **storage tank** and its **capacity**;
- (e) the location of every pump;
- (f) details of the proposed accommodation for the **Council's** meter if it is to be installed within the **premises**;
- (g) the pressure for which the installation has been designed;

- (h) the position of all overflows;
- (i) equipment or plant which uses water as a heat exchange medium for cooling or heating purposes which is or may be connected to a **water installation**; and
- (j) any other information that the **Council** may require.

(3) If the details of the **water installation** on more than one floor of a building are identical, such details may be drawn for one floor only.

(4) If more than one **water installation** is to be installed in a building such installations may be shown on the same drawing provided they are clearly differentiated from each other.

(5) A schedule shall be provided with each drawing or set of drawings, indicating the number of each type of **terminal water fitting** and its nominal size.

III/4. Copies Of Drawings To Be Kept On Site.—A complete set of approved drawings of **installation work** shall be available at the site of the work at all times until receipt by the **authorised delegate** of the completion certificate submitted in terms of section IV/8 (1) (d).

III/5. Unauthorised Work.—If **installation work** has been done in contravention of section III/1, the **authorised delegate** may by written notice require the **owner** of the **premises** concerned to cause such work to comply with that section within a specified period and if work is in progress, to cease the work and may further require the **owner** to remove all such work which does not comply with these By-laws.

CHAPTER IV CONTROL OF INSTALLATION AND OTHER WORK

IV/1. Persons permitted to do Installation and other Work.—(1) No person who is not a contractor registered with the **Council** in terms of section IV/2 shall—

- (a) do **installation work** for which approval is required in terms of section III/1 (1);
- (b) replace a fixed water heater or its associated protective devices;
- (c) inspect, disinfect and test a **water installation**, **fire installation** or a **storage tank**;
- (d) service, repair or replace a **backflow** preventer in terms of section VIII/4 (1); or
- (e) install, maintain or replace a meter provided by an **owner** in a **water installation**.

(2) No person shall require or engage a person who is not a **registered contractor** to do the work referred to in subsection (1).

(3) The provision of subsection (1) shall not apply to a person acting in the scope of his employment with a **registered contractor**.

(4) Notwithstanding the provisions of subsection (1), a person who, in terms of any law in force immediately prior to the commencement of these By-laws was entitled to do the work described in subsection (1) may continue to do such work for a period not exceeding 12 months after the commencement as determined by the **Council** by.

(Editorial Note: Wording as per original *Government Gazette*.)

(5) Notwithstanding the provisions of subsection (1), the **authorised delegate** may permit a person who is not a **registered contractor** to do **installation work** on his

own behalf on **premises** owned and occupied solely by himself and his immediate household: Provided that—

- (a) such person shall make application in the **prescribed** form for permission and pay the **prescribed** fee; and
- (b) the work shall on completion be subject to inspection and test by the **authorised delegate** or a **registered contractor**, and shall not be put into use until it has passed the test and the completion certificate referred to in section IV/8 (1) (d) has been issued.

IV/2. Registration Of Contractors.—(1) Application for registration with the **Council** as a contractor shall be made on the **prescribed** form and be accompanied by the **prescribed charge**.

(2) An applicant for registration shall—

- (a) either be a person who is registered in terms of section IV/3 as a **responsible plumber**, or employs on a fulltime basis a person registered, and conducts his business from **premises** satisfactory to the **Council**; and
- (b) nominate a *domicilium citandi* for the purpose of the serving of notices in terms of these By-laws.

(3) Registration of every contractor shall expire on 31 December of each year, and application for renewal thereof shall be lodged with the **authorised delegate** before 1 December and shall be accompanied by the **prescribed charge**:

Provided that if such registration takes place on or after 1 November in any year, it shall expire on 31 December of the succeeding year.

(4) If a change takes place in the particulars reflected in an application referred to in subsection (1) the contractor shall, within 14 days of the change, notify the **authorised delegate** thereof in writing.

IV/3. Registration Of Responsible Plumbers.—(1) Application for registration with the **Council** as a **responsible plumber** shall be made on the **prescribed** form and be accompanied by the **prescribed charge**.

(2) (a) An applicant for registration shall—

- (i) have qualified as an artisan in the plumbing trade in terms of the Manpower Training Act, 1981 (Act 56 of 1981), and have passed the National Technical Certificate examination at the level of N3 with the relevant trade theory as a subject of success, or hold equivalent qualifications;
- (ii) have had not less than 5 years' practical experience in **installation work**, subsequent to qualifying as an artisan or passing the technical examination or equivalent qualifications referred to in subparagraph (i); and
- (iii) provide proof satisfactory to the **authorised delegate** as to his knowledge of these By-laws; or

(b) be licensed or registered by the **Council** as a plumber at the date of commencement of these By-laws.

(3) Registration of every **responsible plumber** shall expire on 31 December of every year, and application for renewal thereof shall be lodged with the **Council** before 1 December and shall be accompanied by the **prescribed charge**: Provided that if such registration takes place on or after 1 November in any year, it shall expire on 31 December of the succeeding year.

IV/4. Registration Certificates.—(1) The **authorised delegate** shall issue a registration certificate to a contractor or a **responsible plumber** registered with the **Council** in terms of section IV/2 and IV/3 respectively.

(2) A registration certificate shall state the name of the **registered contractor or responsible plumber**, as the case may be, and the date of its issue.

(3) No person shall make an alteration to a registration certificate.

(4) A registration certificate shall—

(a) be issued without alteration; and

(b) at the request of an **officer** be produced to him by the holder within 3 **working days**.

IV/5. Replacement Of Certificates.—(1) A person whose registration certificate is lost, destroyed or damaged, shall forthwith apply to the **Council** on the **prescribed** form for the replacement of such certificate.

(2) An application in terms of subsection (1) shall be accompanied by an affidavit as to the circumstances in which the certificate was lost or destroyed, or the damaged certificate, as the case may be, and the **prescribed charge**.

IV/6. Register Of Contractors and Responsible Plumbers.—(1) The **Council** shall maintain a register of **registered contractors** and **responsible plumbers**.

(2) The register referred to in subsection (1), shall be available for inspection at the relevant office of the **authorised delegate** during normal working hours.

IV/7. Cancellation of Registration.—(1) The **Council** may by written notice cancel the registration of a **registered** contractor if he—

(a) has given false information on an application form submitted in terms of section IV/2 or IV/5;

(b) has submitted to the **authorised delegate** a certificate referred to in section IV/8 (1) (d) which is incorrect or false;

(c) contravenes any provisions of these By-laws;

(d) fails to comply with the requirements of section IV/4 (4) (b); or

(e) allows his registration certificate to be used in a fraudulent manner.

(2) The **Council** may by written notice cancel the registration of a **responsible plumber** if he—

(a) has given false information on an application form submitted in terms of section IV/3 or IV/5;

(b) completes a certificate referred to in section IV/9 (c) or IV/10 (2) (c) which is incorrect or false;

(c) contravenes any provisions of these By-laws;

(d) fails to comply with the requirements of section IV/4 (4) (b); or

(e) allows his registration certificate to be used in a fraudulent manner.

(3) A **registered contractor or responsible plumber** shall, within 7 days of being notified in writing of the cancellation of his registration, surrender his registration certificate to the **Council**.

(4) If the **Council** cancels the registration of a contractor or **responsible plumber**, it shall not consider an application for registration from such person until a period of 12 months has lapsed after the date of the cancellation.

IV/8. Responsibilities of registered contractor.—(1) A **registered contractor** shall—

- (a) unless he is a registered **responsible plumber**, at all times have at least one registered **responsible plumber** in his full-time employment;
- (b) ensure that work undertaken by him is carried out under the control of one registered **responsible plumber** who must be in his full-time employment, and who has been nominated in the form referred to in paragraph (c) or the notice referred to in subsection (2) and has acknowledged acceptance of the nomination by signing the form or notice: Provided that if a **registered contractor** is a registered **responsible plumber** he may nominate himself;
- (c) notify the **authorised delegate** on the **prescribed** form of his intention to commence work referred to in section IV/1, not less than 3 **working days** prior to the commencement; and
- (d) within 5 **working days** of the completion of the work referred to in paragraph (c), submit to the **authorised delegate** a certificate of compliance referred to in section IV/9 (b).

(2) A **registered contractor** shall, within 5 **working days** of a change of registered **responsible plumber** referred to in subsection (1) (b), or any subsequent registered **responsible plumber** nominated in terms of this subsection by written notice to the **authorised delegate** nominate another registered **responsible plumber** who shall signify his acceptance of such nomination.

IV/9. Responsibilities of a Registered Responsible Plumber.—A registered responsible plumber shall—

- (a) ensure that **installation work** done by him and any person under his control complies with these By-laws; and
- (b) certify on the **prescribed** form that such work complies with these By-laws.

IV/10. Work Done By Persons Who Are Not Registered Contractors.—(1) If **installation work** is being done in contravention of section IV/1 the **authorised delegate** may by written notice require the **owner** of the **premises** concerned to cause the cessation of such work until he has employed a **registered contractor** to do the work.

(2) If **installation work** has been done in contravention of section III/1 or IV/1 the **authorised delegate** may by written notice require the **owner** of the **premises** in addition to complying with section III/5 (2) to employ a **registered contractor** to—

- (a) inspect such work and rectify any part of it which does not comply with these By-laws;
- (b) test and disinfect such work in terms of section V/3 and V/4;
- (c) submit to the **authorised delegate** a certificate on the **prescribed** form stating that the work complies with these By-laws.

CHAPTER V TESTING, DISINFECTION AND USE OF WATER INSTALLATIONS

V/1. Testing And Disinfection of water installations.—(1) Before a **registered contractor** submits the certificate referred to in section IV/8 (1) (d), IV/10 (2) (c) and V/2 (3) he may at the discretion of the **authorised delegate** be required to test and disinfect the **water installation** so as to satisfy the requirements of section V/3 or V/4, as the case may be.

(2) For the purpose of a test and disinfection referred to in subsection (1), the **registered contractor** shall supply at his own cost all equipment, materials and labour and shall pay for all water used.

(3) A **registered contractor** shall notify the **authorised delegate** on the **prescribed** form of his intention to carry out a test or disinfection referred to in subsection (1) not less than two **working days** before the date on which he intends to do the work.

(4) If the test or disinfection is not done on the date and at the time stated in the notification referred to in subsection (3), or if the test or disinfection is unsatisfactory, the **registered contractor** shall submit a new notification and pay the **prescribed charge**.

V/2. Testing Or Disinfection Of Water Installation On Requirement By Authorised Delegate.—(1) The **authorised delegate** may by written notice require an **owner** to employ a **registered contractor** at his own cost to—

(a) test his **water installation** in accordance with section V/3; and

(b) disinfect his **water installation** in accordance with section V/4,

(2) The provisions of section V/1 shall *mutatis mutandis* apply in respect of the test or disinfection.

(3) The **registered contractor** referred to in subsection (1), shall, within 7 days of completion, submit to **authorised delegate** the certificate required in terms of section IV/9 (b).

V/3. Pressure Testing.—(1) With all **terminal water fittings** closed, the **water installation** shall be subjected to a water pressure of 1500 kilopascals, or such lesser pressure as the **authorised delegate** may specify in each particular case: Provided that in the case of fire or **combined installations** the water pressure shall be 2 000 kilopascals.

(2) The **water installation** shall be satisfactory if the pressure referred to in subsection (1) is maintained for a period of not less than 15 minutes, without additional input of water into the **water installation** during such period.

(3) A **water installation** may be tested in such sections as the **authorised delegate** may permit.

V/4. Disinfection.—(1) The **water installation** shall be flushed with water from the **water supply system** until clear water discharges from every **terminal water fitting**.

(2) (a) Chlorine shall be added to the **water installation** in such quantity and for such length of time that the total residual chlorine content of water drawn off from all **terminal water fittings** is not less than 5 milligrams per litre.

(b) In addition to the requirements of paragraph (a), the **authorised delegate** may by written notice require that the disinfection process be continued until the result of a bacteriological test indicates an absence of E. coli, Type I in a sample of 100 millilitres of water.

(3) When the disinfection process has been completed, the **water installation** shall be flushed with water from the **water supply system**.

(4) A **water installation** may be disinfected in such sections as the **authorised delegate** may permit.

V/5. Use Of water installation.—(1) A **water installation** or portion thereof shall not be used, other than for building purposes, before the certificate referred to in section IV/8 (1) (d) in respect of such installation has been submitted to the **authorised delegate**.

(2) The receipt by the **authorised delegate** of a certificate shall not relieve the **owner** of his responsibility in terms of section I/3.

CHAPTER VI
GENERAL WATER INSTALLATION REQUIREMENTS

VI/1. Provision And Maintenance Of Water Installations.—(1) An **owner** shall provide and maintain his **water installation** at his own cost and, except—

- (a) in the case of a connection to a **communication pipe**; or
- (b) where permitted in terms of section I/14,

shall ensure that the installation is situated within the boundary of his **premises**.

(2) Before doing work in connection with the maintenance of a portion of his **water installation** which is situated outside the boundary of his **premises**, an **owner** shall obtain the written consent of the **Council** or the **owner** of the land on which such portion is situated, as the case may be.

VI/2. Use Of Pipes And Water Fittings To Be Authorised By Authorised Delegate.—(1) Subject to the provisions of section VI/1 (1), no person shall install or use a pipe or **water fitting** in a **water installation** within the **Council's** area of jurisdiction unless it is included in the schedule of accepted pipes and **water fittings** and in accordance with any conditions imposed in terms of section VI/3 (2).

(2) Notwithstanding the provisions of subsection (1), the **authorised delegate** may, for a specific use in a specific installation, permit the installation or use of a pipe or **water fitting** which is not included in his schedule and otherwise than in accordance with the conditions imposed in terms of section VI/3 (2).

VI/3. Acceptance Requirements For Pipes And Water Fittings.—(1) A pipe or **water fitting** may be included in the schedule referred to in section VI/2 (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 is certified by the Bureau as complying with a specification or standard specification issued by it;
- (c) it bears a certification mark issued in its country of origin in respect of a specification certified by the SABS at least equivalent to the relevant certification or specification issued by the SABS:

Provided that in a case where paragraphs (a), (b) or (c) are not applicable to a pipe or **water fitting**, the **authorised delegate** may, include such pipe or **water fitting** in his schedule, and in such event may require a distinctive mark to be affixed to every such pipe or **water fitting**.

(2) The **authorised delegate** may, in respect of any pipe or **water fitting** included in the schedule referred to in section VI/2 (1) impose such conditions as he deems necessary in respect of the use or method of installation thereof.

VI/4. Schedule Of Accepted Pipes And Water Fittings.—(1) Application for the inclusion of a pipe or **water fitting** in the schedule referred to in section VI/2 shall be made on the **prescribed** form and be accompanied by the **prescribed charge**.

(2) A pipe or **water fitting** shall be included in the schedule for a period of not more than 2 years unless it bears the standardisation mark of the South African Bureau of Standards, and application for its continued inclusion shall be made on the **prescribed** form accompanied by the **prescribed charge**, not less than 2 months before the expiry of each period.

(3) The **authorised delegate** may at any time remove a pipe or **water fitting** from the schedule if the pipe or **water fitting**—

- (a) no longer complies with the criteria upon which its inclusion was based; or
- (b) in his opinion, is no longer suitable for the purpose for which its use was accepted;

(4) The current schedule shall be available for inspection at the office of the **authorised delegate** at any time during working hours.

(5) The **Council** may sell copies of the current schedule at the **prescribed charge**.

VI/5. Performance Criteria For Pipes And Water Fittings.—(1) All pipes and **water fittings**, other than **storage tanks**, shall be capable of withstanding an internal pressure specified in section V/3 (1).

(2) Brass components of a **water fitting** intended to be in direct contact with water shall be of a copper alloy of which no individual reading, when five random brass samples are tested in accordance with the requirements of ISO 6509 of 1981, shall show a depth of penetration exceeding 250 micrometers.

VI/6. Design Criteria For Water Installations.—(1) (a) The static water pressure at a **terminal water fitting** shall not exceed 600 kilopascals.

(b) The **authorised delegate** may, on application by an **owner** and on payment of the **prescribed charge**, determine and furnish the **owner** with the value of the pressure in the **water supply system** relating to his **premises** over such period as the **owner** may request.

(2) The velocity of flow of water in a pipe shall not exceed 2 metres per second.

(3) Storage of a minimum quantity of water, to be used for purposes other than fire fighting or air-conditioning, shall be provided in accordance with Table VI/1.

TABLE VI/1

1	2
Category of premises	Capacity of Storage
Hospitals, clinics, nursing homes, old age homes and other buildings from which the occupants cannot readily be removed in the event of an interruption of water supply. Educational institutions.	250 litres for every bed which the building is designed to accommodate. 5 litres for every person for whom the building is designed to accommodate.
Multiple dwelling units, exceeding a height determined in terms of section II/10 (2) or three stories whichever is the lower. Hotels, boarding houses and hostels.	150 litres per dwelling unit 90 litres for every person whom the building is designed to accommodate
Commercial premises , including offices and shops.	15 litres for every 10 square metres of nett floor area.

VI/7. Pumping of Water.—(1) Except water for fire fighting purposes taken through a pumping connection referred to in section IX/3, if water is to be pumped from the **water supply system**, it shall be pumped from a **storage tank** which is fed by gravity from the **main** and complies *mutatis mutandis* with the provisions of section VI/10 or VI/12.

(2) The **owner** shall provide pumping facilities, with at least two pumpsets of such size that any one of them is capable of delivering the required flow of water.

(3) The **owner** shall ensure that each pumpset referred to in subsection (2) can be selected for duty at any time.

(4) Each pumpset referred to in subsection (2) shall include—

- (a) protection against low water pressure in its suction pipe;
- (b) an isolating valve, installed on both sides of the pump; and
- (c) a non-return valve installed in the outlet pipe from the pump and situated between the pump and the isolating valve referred to in paragraph (b).

VI/8. Installation of Pipes.—(1) If a pipe is laid underground the vertical distance between the top of the pipe and finished ground level shall be—

- (a) not more than 1 metre; and
- (b) no less than—
 - (i) 450 millimetres in the case of a pipe not exceeding 75 millimetres in diameter; or
 - (ii) 750 millimetres in the case of a pipe not exceeding 75 millimetres in diameter.

Provided that if, in the opinion of the **authorised delegate** it is not possible to comply with paragraph (a) or (b) over a particular length of pipe, shall specify the conditions under which such length shall be laid.

(Editorial Note: Wording as per original *Provincial Gazette*. It is suggested that the word “Provided” is intended to be “Provided”.)

(2) No pipe shall be laid within a horizontal distance of 500 millimetres from any drain or sewer: Provided that where a pipe crosses a drain or sewer at right angles, it may do so with a vertical separation of not less than 100 millimetres.

(3) (a) A pipe which passes under a building shall be enclosed in a sleeve which extends over the full distance that the pipe passes under the building and which shall be of such cross-sectional area as will permit the removal of the pipe:

Provided that there shall be no bend in the pipe or junction with another pipe over the length that it is enclosed in the sleeve and adequate space shall be available at either end of the sleeve for the removal and replacement of the pipe.

- (b) If a pipe passes under a concrete surface it shall be enclosed in a sleeve in compliance with paragraph (a), or in a duct filled with sand and covered in such a manner as to provide ready access to the pipe.

(4) A pipe shall not be installed—

- (a) within a wall or floor unless it is embedded with mortar in a chase or enclosed in a duct from which it can be removed;
- (b) within a cavity in a wall; or
- (c) integrally with a member of a concrete or masonry structure.

(5) (a) A pipe which is not otherwise held in place shall be secured by means of pipe supports which shall be of a type and material of manufacture appropriate to the pipe and the temperature of the water conveyed by it.

- (b) the spacing of supports shall not exceed that given in Table VI/2.
- (c) The requirements of paragraph (b) may be deviated from if the space between pipe supports are such that, under normal operating conditions—
 - (i) the permissible maximum stress for the material of which the pipe is manufactured, is not exceeded; and
 - (ii) the maximum deflection of the pipe below a straight line between its supports does not exceed 1/150 of the distance between such supports.

TABLE 2

Nominal pipesize mm	Maximum distance between supports in metres				
	Metallic pipes	Rigid plastics pipes		Non-rigid plastics pipes	
	Horizontal inclined or vertical	Horizontal or inclined	Vertical	Horizontal or inclined	Vertical
10	—	0,50	1,00	0,25	0,50
15	2,0	0,60	1,20	0,30	0,60
20	2,0	0,70	1,40	0,35	0,70
25	2,0	0,75	1,50	0,38	0,75
32	2,5	0,85	1,70	0,43	0,85
40	2,5	0,90	1,80	0,45	0,90
50	3,0	1,05	2,10	0,50	1,00
65	3,0	1,20	2,40	0,60	1,20
80	4,0	1,35	2,70	0,67	1,35
100	4,0	1,50	3,00	0,75	1,50
125	4,0	1,70	3,40	0,85	1,70
150	4,0	2,00	4,00	1,00	2,00

(d) If a pipe is so situated that it may come in contact with a structural member of a building, it shall be securely fixed to the member.

(6) A standpipe shall be securely fixed so as to prevent movement.

(7) If the **authorised delegate** is of the opinion that a pipe or a **water fitting** of a particular type is unsuitable for use in a particular situation he may by written notice to the **owner**—

(a) prohibit the use thereof; or

(b) require protective measures acceptable to him to be supplied thereto.

(8) The **authorised delegate** may require that different **water installations** on **premises** bear an acceptable means of identification or where practical are identified by means of the colour code system contained in SABS 0140: Identification of Colour Marking, Par III: Contents of Pipelines, as published in the *Government Gazette* by General Notice 463 dated 9 July 1982.

VI/9. Isolating Valves.—(1) (a) An isolating valve shall be installed in the **service pipe** of a **water installation** at a point not more than 1,5 metres inside the boundary of the **premises** concerned.

(b) If a valve referred to in paragraph (a) is situated underground access to it shall be such that it may readily be operated.

(2) An isolating valve shall be installed in a readily accessible position—

(a) where any pipe enters any building or any portion of a building in separate occupation;

(b) on a branch pipe from a **service pipe**;

(c) on a branch pipe serving a flushing cistern or a flush valve, adjacent to such cistern or valve: Provided that such isolating valve may be omitted if a flushvalve incorporates its own isolating valve;

(d) on each side of, and adjacent to, a **backflow** preventer or pressure reducing valve, or combination of **backflow** preventer and pressure reducing valve;

- (e) in the case of a **storage tank**—
- (i) on the inlet pipe adjacent to, and upstream of, the valve controlling the inlet of water to the tank; and
 - (ii) on the outlet pipe connected to the **water installation** and adjacent to the tank,
- and no connection shall be made to an inlet or outlet pipe between the isolating valve and the tank.

(3) The **authorised delegate** may, by written notice require an **owner** to install an isolating valve at such point in his **water installation** as he deems fit.

VI/10. Storage Tanks Having a Capacity of More Than 2 Kilolitres.—(1) A **storage tank** having a **capacity** of more than 2 kilolitres shall be installed in such a position that its exterior and interior can readily be inspected, cleaned and maintained.

(2) A tank referred to in subsection (1) shall have no opening to the atmosphere under operating conditions other than the overflow pipe referred to in subsection (5) and suitable protected vent.

(3) The vertical distance between the discharge point of an inlet pipe to a **storage tank**, and the top of an overflow pipe from the tank shall be not less than 50 millimetres or twice the internal diameter of the inlet pipe, whichever is the greater: Provided that the vertical distance shall not exceed 150 mm.

(4) The vertical distance between the bottom of an overflow pipe from a tank and the **operating water level** in the tank shall be not less than 50 millimetres.

(5) An overflow pipe from a **storage tank** shall—

- (a) have a discharge capacity of not less than that of the inlet pipe serving the tank without the inlet becoming submerged;
- (b) discharge through an air gap of not less than twice the internal diameter of the pipe into a drain pipe; and
- (c) be protected against the entry of insects, animals and other sources of **pollution**.

(6) An outlet pipe from a **storage tank** shall be so situated that water cannot be drawn off from such tank below a point less than 50 millimetres above the internal floor thereof.

(7) A **storage tank** shall be provided with a scour pipe so situated that all the water in the tank can be drained therefrom.

(8) The inlet of water to a **storage tank** shall be controlled by means of a control valve installed outside the tank in the inlet pipe.

(9) A warning pipe, or with the prior consent of the **authorised delegate** an approved device, shall be installed to detect an overflow condition.

(10) Access to the interior of a **storage tank** shall be through the side of the tank by means of an opening which shall be—

- (a) of a size and shape which may be circumscribed by a circle having a diameter of not less than 600 millimetres; and
- (b) located below the **operating water level** in the tank.

(11) If provision is made for the storage of water in a building in terms of section VI/6 (3), the **storage tank** serving the building shall be divided into two self-contained compartments, each of which shall comply with the relevant provisions of these By-laws except those regarding **capacity**. The components shall be so arranged so that each may be shut down for maintenance and cleaning purposes without causing an interruption to

the supply of water to the **water installation**: Provided that the storage may take the form of separate tanks, each complying with the provisions of these By-laws.

(12) The **authorised delegate** may by written notice require an **owner** to install a sampling tap in a tank storing water for potable purposes situated at a point not more than 150 millimetres or less than 50 millimetres above the internal floor of the tank.

(13) If a tank serves both a general and a **fire installation** the operation of the tank shall be so designed as to ensure that the portion of the contents of the tank which is reserved for the **fire installation** cannot become stagnant.

VI/11. Inspection and Maintenance Of Storage Tanks and Inlet Control Valves.—(1) The **owner** of **premises** on which a **storage tank** having a capacity of more than 2 kilolitres is installed shall, not less than once in every 5 years, cause such tank to be drained, inspected and disinfected by a **registered contractor**.

(2) Notwithstanding the provisions of subsection (1)—

- (a) the **authorised delegate** may, if he deems that the water in a **storage tank** or in the **water installation** served by the tank is unsuitable for use, by written notice require the **owner** to cause the tank to be drained forthwith and inspected; and
- (b) if a tank becomes submerged, or in any way subjected to a condition which could cause the contents thereof to become polluted, the **owner** shall forthwith cause the tank to be drained and inspected.

(3) Before the tank referred to in subsection (2) is returned to use it shall be cleaned and the **water installation** served by it disinfected in accordance with section VI/4.

(4) The inlet control valve referred to in section VI/10 (8) and overflow warning device referred to in section VI/10 (9) shall be inspected and serviced not less than once in every 12 months.

(5) (a) The **owner** shall maintain a permanent record of all inspections carried out in terms of this section in which the **registered contractor** who did such work shall record—

- (i) his name, address and registration number;
 - (ii) the date on which such work was done; and
 - (iii) the details of repairs or replacements that were effected.
- (b) The record referred to in paragraph (a) shall be available for inspection by the **authorised delegate** at all reasonable times.

VI/12. Storage Tanks Having A Capacity Of 2 Kilolitres Or Less.—(1) A **storage tank** having a **capacity** of 2 kilolitres or less shall be installed in such a position that—

- (a) its exterior and interior can be readily inspected; and
- (b) it can be cleaned internally.

(2) The provision of section VI/10 (3), (4) and (6) shall apply in respect of the positions of the inlet, overflow and outlet pipes serving a **storage tank**.

(3) An overflow pipe from a **storage tank** shall—

- (a) have a discharge **capacity** of not less than that of the inlet pipe serving the tank without the inlet becoming submerged;
- (b) slope downwards towards its outlet and discharge in a position where discharge of water through it can readily be seen; and

- (c) be protected against the entry of insects, animals and other sources of **pollution**.

(4) Access to the interior of a **storage tank** shall be achieved in such a manner that it is not possible to refill and return the tank to use until the access has been closed.

VI/13. Emergency Supply Connections To Domestic Installations.—(1) A pumping connection fitted with a coupling of a size and type specified by the **authorised delegate** shall be provided in the pipe serving the **storage tank** in a hospital, clinic, nursing home, old-age home and other building from which the occupants cannot readily be removed in the event of an interruption of water supply.

(2) A non-return valve shall be installed immediately upstream of the connection referred to in subsection (1).

(3) The connection referred to in subsection (1) shall be situated in a readily accessible position outside the building at a height of not more than 1 metre above finished ground level.

VI/14. Installation of Fixed Water Heaters.—(1) A fixed water heater shall be so designed and installed that either—

- (a) the water contained therein is at all times open to the atmosphere; or
- (b) provision is made for—
- (i) the discharge of water arising from the expansion of the water contained therein resulting from normal operation of the heater; and
 - (ii) the dissipation of pressure resulting from abnormal operation of the heater.

(2) A vacuum relief valve shall be fitted to the inlet pipe to, and the outlet pipe from, a fixed water heater at a height of not less than 300 millimetres above the maximum water level in the heater.

(3) If a pressure reducing valve associated with a fixed water heater incorporates vacuum relief or expansion relief facilities, no isolating valve shall be installed between such valve and the water heater.

(4) Water discharged from a fixed water heater due to the expansion of the water shall be led to a position where it can readily be seen.

(5) A fixed water heater shall be fitted with a heat control device which shall cut off the supply of heat energy when the temperature of the water in the heater exceeds 82 degrees Celsius.

(6) A **consumer** shall ensure that a vent pipe attached to any fixed water heater used by him remains unobstructed and open to atmosphere at all times.

(7) No **terminal water fitting** shall be attached to the outlet of an open outlet type fixed water heater, except a fitting that is designed to discharge hot and cold water while keeping the hot water outlet open to atmosphere.

VI/15. Maximum Temperatures in Hot Water Circulating Systems.—The temperature of the water which discharges from a **terminal water fitting** supplied from a hot water re-circulating system shall not exceed 55 degrees Celsius.

VI/16. Back Syphonage of Hot Water.—Acceptable measures to prevent the **back syphonage** of water between hot and cold water in a **water installation** shall be taken.

VI/17. Provision of Strainers.—(1) Provision shall be made either in the fitting concerned or in a **water installation** for the prevention of entry of solid particles

exceeding 710 micrometers in size into a fitting controlling the direction of flow of water or the water pressure in the installation.

(2) If compliance with the requirements of subsection (1) is effected by means of a strainer which is not incorporated in a fitting referred to in subsection (1), such strainer shall be—

- (a) of a design which permits removal of the strainer element without the need to remove the fitting from the **water installations**; and
- (b) installed in a position where it is readily accessible for maintenance purposes.

VI/18. Prevention of Pressure Surges.—No person shall connect to a **water installation**, a **water fitting** or apparatus which causes or is likely to cause damage to the **water supply system** or another **water installation**, as a result of pressure surges.

VI/19. Sizes of Pipe.—(1) The size of any pipe in a **water installation** shall be sufficient to provide the quantity of water required for the proper functioning of any part or parts of a **water installation** without exceeding the velocity of flow given in section VI/6 (2).

(2) The size of any such pipe shall be maintained up to the point or points where such quantity is required.

VI/20. Installation of Solar Water Heaters.—A solar water heating system shall be installed in accordance with the code of practice for the installation and operation of solar water heater systems (SABS.0106-1985), as published in the *Government Gazette* by General Notice 463 dated 9 July 1982.

(Editorial Note: Wording as per original *Provincial Gazette*. It is suggested that the words “installtion” and “solare” is intended to be “installation” and “solar”.)

CHAPTER VII PREVENTION OF UNDUE CONSUMPTION OF WATER

VII/1. Waste of Water.—(1) No **consumer** shall 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 fitting**;
- (d) an overflow of water to persist;
- (e) an inefficient use of water to persist.

(2) An **owner** shall repair or replace any part of his **water installation** which is in such a state of disrepair that in the opinion of the **authorised delegate** it is either causing or is likely to cause an occurrence listed in section VII/1 (1).

(3) If an **owner** fails to comply with section VII/1 (3) the **authorised delegate** may take such measures as he deems fit without prior notice and recover the cost of doing so from the **owner**.

(4) (a) A **consumer** shall ensure that the operation of any equipment or plant connected to his **water installation** uses water in an efficient manner;

- (b) The **authorised delegate** may by written notice prohibit the use by a **consumer** of any equipment in a **water installation** if, in his opinion, its use of water is inefficient. Such equipment shall not be returned to use

until its efficiency has been restored and a written application to do so has been approved by the **authorised delegate**.

VII/2. Use Of Water As A Heat Exchange Medium.—No person shall allow water, used as a heat-exchange medium in any equipment or plant and supplied from a **water installation**, to run continuously to waste except for maintaining a **prescribed** level of total dissolved solids in a re-circulating plant.

VII/3. Hot-Water Distribution Systems.—(1) A pipe conveying hot water directly from a fixed water heater, or from the point of take-off from a hot-water circulating system, to a **terminal water fitting** shall not contain a volume of more than 4 litres.

(2) A central hot water system shall be of the circulating type, and the circulating pipes shall be insulated with material which—

- (a) has a coefficient of thermal conductivity of not more than 0,04 watts per metre per degree Celsius; and
- (b) is of such thickness that the temperature at its external surface under normal operating conditions shall not be more than 6 degrees Celsius above the ambient temperature.

(3) The electrical heating element of a fixed water heater having a capacity of more than 500 litres shall be removable without loss of water from such heater.

VII/4. Discharge from Terminal Water Fittings to be Visible.—A **terminal water fitting**, other than a float valve serving a cistern or a **storage tank**, shall be installed in such a position and in such a manner that discharge of water therefrom can be readily seen.

VII/5. Overflows from Cisterns.—The overflow pipe from a water-closet cistern shall be carried through an outside wall of the building concerned so that discharge of water therefrom is readily visible from outside the building.

VII/6. Flushing of Water-Closet Pans and Urinals.—(1) A flushing device serving a water-closet pan or urinal shall be actuated—

- (a) manually, by a person using such pan or urinal; or
- (b) non-manually, by means of an approved apparatus which causes the flushing device to operate after each use of such pan or urinal.

(2) A flushing device serving a water-closet pan shall not be capable of discharging more than 9,50 or less than 8,50 litres of water during one complete flush under normal operating conditions, and such a device shall be connected to a watercloset pan which is so designed that its trap will be cleared in one such complete flush.

(3) A non-manually operated flushing device shall be so designed that if it malfunctions no flush will take place.

(4) No automatic cistern or tipping tank shall be used for flushing a urinal.

(5) A separate flushing device shall serve each—

- (a) wall-mounted urinal;
- (b) stall urinal; and
- (c) 1.8 metres length of slab urinal.

(6) A flushing device serving a urinal shall not be capable of discharging more than 2 litres or less than 1 litre of water during one complete flush.

VII/7. Metering Taps and Showers.—(1) Each wash basin in a battery of three or more on a **premises** shall be fitted with a metering type of tap which limits the discharge of water in each usage to not more than 1 litre.

(2) Each shower in a battery of showers of two or more on a **premises** shall be fitted with metering valves to each shower which limits the discharge of water in each usage to not more than 2,5 litres.

VII/8. Terminal Water Fittings Outside Buildings.—No owner shall install on a premises, apart from a residential premises, a terminal water fitting outside a building unless it—

- (a) incorporates a self-closing device;
- (b) has a removable handle for operating purposes;
- (c) is capable of being locked to prevent unauthorised use; or
- (d) is a demand type of tap which limits the quantity of water discharged in each operation.

CHAPTER VIII PREVENTION OF POLLUTION OF WATER

VIII/1. Owner To Prevent Pollution Of Water.—An **owner** shall at his own cost, take the necessary steps, acceptable to the **authorised delegate**, to prevent the entry of a substance which may be, a danger to health or adversely affect the potability of water into—

- (a) the **water supply system**; and
- (b) any part of the **water installation** on his **premises**.

(Editorial Note: Wording as per original *Provincial Gazette*. It is suggested that the word “potability” is intended to be “portability”.)

VIII/2. Protection Of water supply system.—(1) A measure required in terms of subsection (2) and acceptable to the **authorised delegate**, for the prevention of the **backflow** of water from a **water installation** to the **water supply system** shall be provided and maintained by the **owner** in the case

- (a) a **fire or combined installation** on a **premises**;
- (b) a **general installation** serving the following activities—
 - (i) medical treatment of people or animals;
 - (ii) medical, pharmaceutical or chemical research and manufacturing;
 - (iii) agriculture, including dairies and nurseries;
 - (iv) photographic processing;
 - (v) laundering and dry-cleaning;
 - (vi) metal plating; or
 - (vii) treatment of hides and skins;
- (c) a **general installation** serving
 - (i) mortuaries;
 - (ii) abattoirs;
 - (iii) sewage purification works;

- (iv) refuse pulverising works;
- (v) harbours;
- (vi) oil processing and storage facilities;
- (vii) wineries, distillers, breweries, yeast and cold drink factories;
- (viii) sports fields; or
- (ix) any other **premises** on which an activity is carried out which in the opinion of the **authorised delegate** is likely to cause a danger to health or affect the potability of water in the event of a substance resulting from such activity entering the **water supply system**.

(Editorial Note: Wording as per original *Provincial Gazette*. It is suggested that the word “potability” is intended to be “portability”.)

- (d) a **general installation** on any **premises** after issue of a written notice by the **authorised delegate** to do so.

(2) The measures required in terms of subsection (1) are

- (a) the discharge of water from the **service pipe** into a **storage tank** through an air gap in accordance with section VI/10 (3); or
- (b) the passing of such water through;
 - (i) a reduced pressure **backflow** preventer; or
 - (ii) a double check **backflow** preventer; or
- (c) any other measures accepted by the **authorised delegate** which achieve the same purpose as (a) or (b).

(3) The **owner** shall ensure that no connection is made to his **service pipe** between—

- (a) the point of discharge from the pipe into the **storage tank** referred to in subsection (2) (a);
- (b) the **backflow** preventer installed in terms of subsection (2) (b);
- (c) the measure accepted in terms of subsection 2 (c); and the **communication pipe** concerned.

(4) No **consumer** shall connect anything to a **water installation** or use it in a manner which may affect the potability of the water in it without first ensuring that adequate measures or devices exist to prevent a deterioration in water quality in the **water installation**.

(Editorial Note: Wording as per original *Provincial Gazette*. It is suggested that the word “potability” is intended to be “portability”.)

VIII/3. Design And Installation Of Backflow Preventers.—(1) A **backflow** preventer shall be so designed and installed that a condition of **backflow** in the pipe in which it is installed shall be readily detected.

(2) A **backflow** preventer shall be installed in a readily accessible position where it can be inspected, and from which it can be removed for the purposes of servicing, repair and replacement without alteration to the **water installation** or the structure within which it is situated.

(3) A **backflow** preventer which provides for the discharge of water to atmosphere, shall be installed above ground in such a position that it cannot be submerged in water or other liquid.

VIII/4. Inspection And Servicing Of Backflow Preventers.—(1) The **owner** of **premises** on which a reduced pressure or double check **backflow** preventer is installed shall, at his own expense, cause the **backflow** preventer to be—

- (a) inspected and serviced by a **registered contractor** not less than once in every 12 months to ensure that it is in working order; and
- (b) replaced or completely overhauled once in every 5 years.

(2) The **owner** shall maintain a record of the inspections and services referred to in subsection (1), in the manner **prescribed** in section VI/11 (5).

VIII/5. Protection Of Water Installation.—(1) An **owner** shall, by a measure described in subsection (2) which is agreed to by the **authorised delegate**, prevent the back-siphonage into the **water installation** of a substance which is likely to cause a danger to health or affect the potability of water, in the case of—

- (a) a **terminal water fitting** which is so designed that a hose or other flexible pipe is, or can be, attached to it, which shall include a hose bibcock, a laboratory tap, and a moveable shower unit;
- (b) a fire hosereel installed in a **combined installation**;
- (c) an underground irrigation system; or
- (d) any other fitting which may provide a contact between polluted water and the **water installation**.

(Editorial Note: Wording as per original *Provincial Gazette*. It is suggested that the word “potability” is intended to be “portability”.)

(2) The measures required in terms of subsection (1) are

- (a) a vacuum breaker situated on the highest point of an upstand which shall be not less than 300 millimetres above the point of discharge of the highest **terminal water fitting** concerned;
- (b) a terminal vacuum breaker situated not less than 300 millimetres above the highest point of connection of a pipe to a riser serving the fittings concerned; or
- (c) a single check valve or vacuum breaker incorporated in, attached to or installed adjacent to, a **terminal water fitting**.

(3) The lower point of discharge of the outlet of a **terminal water fitting** shall be not less than 25 millimeters above a flood level of a fixed receptacle into which such fitting discharges.

(4) An **owner** shall ensure that no inter-connection is made between—

- (a) a **general installation** and a **fire installation** if they are supplied through separate **communication pipes**; or
- (b) a **water installation** conveying water supplied by the **Council** and an installation conveying water from another source of supply, unless **backflow** into such **general installation** or **water installation** cannot occur.

(5) An **owner** shall ensure that no inter-connection is made between a **water installation**, or other installation conveying potable water from any source, and a drain or sewer.

(6) (a) If the **authorised delegate** is of the opinion that an activity carried out or intended to be carried out on a **premises** could give rise to a substance which would have a toxic effect if it gained entry into a **water installation**, he may by written notice require

the **owner** to install a **storage tank** from which the water required for such activity shall be drawn.

(b) The entry of water into the tank referred to in paragraph (a) shall be solely from a pipe which discharges at a height of 75 millimetres or twice the diameter of the pipe, whichever is the greater, above the flood level rim of the tank.

CHAPTER IX FIRE INSTALLATIONS

IX/1. Unmetered Supply Of Water For Fire Fighting Purposes.—(1) If the **Council** supplies water for fire fighting purposes to any **premises** through an unmetered connection, the **authorised delegate** may—

- (a) by written notice advise the **owner** of his intention to install a device at the owner's cost in a manner and position specified by him to indicate if water has been used in a **fire installation**; and
- (b) place a seal on the operating valve of every hydrant and hosereel in the **fire installation** served by such connection.

(2) The provisions of section II/14 shall apply *mutatis mutandis* to a device installed in terms of section IX/1 (1) (a).

(3) If an **officer** inspects a **fire installation** and finds that a seal referred to in subsection (1) (b) is broken, or the device referred to in subsection (1) (a) indicates that water has been used in the **fire installation**, the **authorised delegate** may—

- (a) estimate the quantity of water which in his opinion has been drawn off from the installation since the previous inspection; and
- (b) the **Council** may render an account to the **consumer** for—
 - (i) such quantity of water; and
 - (ii) the **prescribed charge** for the replacement of the seal.

(4) If the use of water for purposes other than fire fighting has occurred on any **premises** the **authorised delegate** may

- (a) by written notice, require the **consumer** on that **premises** within a specified period, to cease using water from his **fire installation** for purposes other than fire fighting.
- (b) If a **consumer** fails to comply with a notice served in terms of subsection (4) (a) the **authorised delegate** may install a meter in the **communication pipe** serving the **owner's fire installation** and charge the **owner** for the cost thereof.

(5) If a **consumer** uses water from his **fire installation** for purposes other than extinguishing or prevention of a fire or for maintenance purposes he shall notify the **Council** within three **working** days of such action.

IX/2. Sizes Of Pipes.—(1) The nominal diameter of a **communication pipe** serving a **fire installation** shall be not less than—

- (a) 75 millimetres, in the case of an automatic sprinkler installation;
- (b) 100 millimetres, in the case of a fire or **combined installation** incorporating hydrants; and
- (c) 25 millimetres, in the case of a fire or **combined installation** incorporating hosereels.

(2) The nominal diameter of a pipe in a **fire installation** supplying water to fire hydrants shall be not less than—

- (a) 75 millimetres, if its length does not exceed 50 metres; and
- (b) 100 millimetres, if its length exceeds 50 metres.

(3) The nominal diameter of a pipe serving hoses on any one floor of a building shall be not less than

- (a) 25 millimetres, if it serves 1 or 2 hoses;
- (b) 32 millimetres, if it serves 3 hoses;
- (c) 40 millimetres, if it serves 4 or 5 hoses; or
- (d) 50 millimetres, if it serves more than 5 hoses.

IX/3. Pumping Connections.—(1) The pipe which serves a hydrant and hose reel installation shall be provided with a twin pumping connection.

(2) A pipe serving only hoses which are situated in a building at a height of more than 6 metres above the ground level abutting on the building shall be provided with a single pumping connection.

IX/4. Non-Return Valves.—(1) A non-return valve shall be installed in any **fire installation** between a pumping connection referred to in section IX/3 (1) or (2), and the **communication pipe** serving the installation.

(2) A pipe which is connected to a **storage tank** and is provided with a pumping connection shall be provided with a non-return valve installed in such a position and manner as to prevent the flow of water into the tank when the pumping connection is in operation.

IX/5. Pressure Gauge And Test Valve.—(1) (a) A pressure gauge shall be installed in a fire installation outside the building concerned, in a position where it can be observed without the necessity of entry into the building.

- (b) A test valve shall be installed immediately upstream of the pressure gauge referred to in paragraph (a).

(2) The pressure gauge referred to in subsection (1) shall

- (a) register a maximum pressure of not less than 2500 kilopascals; and
- (b) be graduated at intervals of not less than 25 kilopascals; and
- (c) have an error of not more than 2 percent over its range of operation.

(3) The **Council** may at any time operate the test valve and pressure gauge referred to in subsection (1).

IX/6. Installation Of Pipes.—(1) No non-metallic pipes shall be installed above ground in either a **fire installation** or a **combined installation**.

(2) No pipe in a **fire installation** shall be enclosed in the same duct as a fuel or gas pipeline.

CHAPTER X MISCELLANEOUS PROVISIONS

X/1. Use Of Water From Sources Other Than The Water Supply System.—

(1) No person shall use or permit the use of water obtained from a source other than the **water supply system**, except with the prior consent of the **authorised delegate** and in accordance with such conditions as he may impose, for—

(a) **domestic, commercial or industrial purposes;**

(b) the purpose of filling a swimming pool.

(2) Any person desiring the consent referred to in subsection (1) shall provide the **authorised delegate** with evidence satisfactory to him that the water referred to in that subsection complies, whether as a result of treatment or otherwise, with the requirements of SABS specification 241-1971: Water for Domestic Supplies published in the *Government Gazette* under General Notice 463 dated 9 July 1982 which are **prescribed** by the **Council**, or that the use of such water does not or will not constitute a danger to health.

(3) Any consent given in terms of subsection (1) may be withdrawn if in the opinion of the **authorised delegate**—

(a) a condition imposed in terms of subsection (1) is breached; or

(b) the water no longer conforms to the requirements referred to in subsection (2).

(4) If water obtained from a **borehole** or other source of supply on a **premises** is used for a purpose which gives rise to the discharge of such water or a portion thereof into the **Council's** sewerage system, the **authorised delegate** may install a meter in the pipe leading from such **borehole** or other source of supply to the point or points where it is so used.

(5) The provisions of section II/15 shall mutatis mutandis apply in respect of the meter referred to in subsection(4).

X/2. Notification of Boreholes.—The authorised delegate may by public notice require—

(a) the **owner** of any **premises** within the area of jurisdiction of the **Council** upon which a **borehole** exists or, if the **owner** is not in occupation of such **premises**, the **occupier** thereof, to notify him on the **prescribed** form of the existence of a **borehole** on the **premises**, and provide him with such information in respect thereof as he may require; and

(b) the **owner** or **occupier** of a **premises** who intends to sink a **borehole** on the **premises** to notify him on the **prescribed** form of such intention before work in-connection therewith is commenced.

X/3. Sampling Of Water.—(1) The **authorised delegate** 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 section X/1 (2).

(2) The **prescribed charge** for the taking and testing of the samples referred to in subsection (1) shall be paid by the person to whom consent to use the water was granted in terms of section X/1 (1).

X/4. Supply Of Non-Potable Water By Council.—(1) The **Council** may on application in terms of section II/2, grant a supply of non-potable water to a **consumer**.

(2) Any supply of water granted in terms of subsection (1) shall not be used for **domestic** or any other purpose which, in the opinion of the **Council** may give rise to a health hazard.

X/5. Conditions Of Supply Of Non-Potable Water.—(1) No warranty, expressed or implied, applies to the purity of any non-potable water supplied by the **Council** or its suitability for the purpose for which the supply was granted.

(2) The supply of non-potable water shall be entirely at the risk of the **consumer**, both as to condition and use, who shall be liable for any consequential damage or loss

arising to himself or others caused directly or indirectly therefrom, including the consequences of any bona fida fault of the **Council** or malfunction of a treatment plant.

(Editorial Note: Wording as per original *Provincial Gazette*. It is suggested that the word “bona fida” is intended to be “*bona fide*”.)

X/6. Use Of Non-Potable Water For Irrigation Purposes.—(1) If non-potable water supplied by the **Council** is used for irrigation purposes, the **consumer** shall ensure that it is applied uniformly over the irrigated areas and in such a way as to prevent ponding.

(2) The **consumer** shall, at his own expense, take such steps as may be necessary to prevent any run-off of surplus non-potable water from irrigated areas.

(3) If the **consumer** fails to take the steps referred to in subsection (2), the **authorised delegate** may by written notice require him to take steps within a specified period.

(4) If the **consumer** fails to take such steps the **authorised delegate** may do so at the **consumer’s** expense.

X/7. Warning Notices.—(1) On **premises** on which non-potable water is used the **consumer** shall ensure that every **terminal water fitting** and every appliance which supplies or uses such water is clearly marked with a weatherproof notice indicating the water therefrom is unsuitable for **domestic purposes**.

(2) In an area where treated sewage effluent is used, the **consumer** shall erect weatherproof notices in prominent positions warning that such effluent is not suitable for **domestic purposes**.

(3) Every warning notice **prescribed** in terms of subsection (1) and (2) shall be in both official languages and such other language as the **Council** may require.

X/8. Repeals.—(1) The enactments referred to in the First Part of the Schedule to these By-laws are hereby repealed with effect from 1 March 1996 save as otherwise indicated therein.

(2) The enactments referred to in the Second Part of the Schedule to these By-laws are hereby declared to have no application within the Durban Metropolitan Area referred to in By-laws 1A to the extent indicated therein.

SCHEDULE FIRST PART

DESCRIPTION	EXTERNAL REPEAL
1. Water Supply By-laws and Tariff of Charges, 1964 (as amended), of the North Coast Regional Water Supply Corporation, published under Provincial Notice No. 285	the whole, insofar as they relate to the supply and consumption of water;
2. Water Supply By-laws and Tariff of Charges of the Amanzimtoti Regional Water Supply Corporation published under Provincial Notice No. 11 of 1956 (as amended)	the whole
3. Water Supply By-laws and Tariff of Charges of the Pinetown Regional Water Services Corporation published under Provincial Notice No. 21 of 1982 (as amended)	the whole
4. Water Supply By-laws of the Township	the whole

of Westville published under Provincial Notice No. 393 of 1953 (as amended)	
5. Tariff of Charges for the supply of water by the Tongaat Town Board published under Municipal Notice No. 84 of 1976 (as amended)	the whole
6. The Interim Water Supply By-laws of the Durban Transitional Metropolitan Council	the whole
7. Water Supply By-laws of the City of Durban	the whole

SECOND PART

1. Tariff of Water Charges in paragraph 3 (a) of Schedule B to Government Notice R2626 of 1990	the whole
2. Paragraph 24A of Proclamation R293 of 1962	the whole
3. Part 10 of the Water Supply Regulations of the Development and Services Board, published under Provincial Notice 237 of 1942 (as amended)	the whole