

# SEWAGE DISPOSAL

[MUNICIPAL NOTICE NO. 27 OF 1999.]  
[DATE OF COMMENCEMENT: 13 MAY, 1999.]

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## DURBAN TRANSITIONAL METROPOLITAN COUNCIL SEWAGE DISPOSAL BY-LAWS

Notice is hereby given in terms of section 162 (1) of the Constitution of the Republic of South Africa that, at its meeting held on 1999-04-12, the Durban Transitional Metropolitan Council, acting under and in terms of section 156 (2) of the said Constitution read with section 29 (8) (a) of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), did adopt the following subjoined By-laws which said By-laws are to come into effect on the date of publication of this notice.

E.W.H. MORTON  
CHIEF EXECUTIVE OFFICER

CITY HALL  
DURBAN

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CHAPTER I  
DEFINITIONS

**1.1 In these By-laws.—**

“**approved**” means approved by an authorised officer;

“**an authorised officer**” means an officer of the Council to whom the Council has delegated or assigned a power, duty or function under or for the purpose of these By-laws, in relation to the exercise or performance of that power, duty or function and includes in relation thereto any officer of the Council acting under the direction and control of the first mentioned officer;

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

“**borehole**” means a hole sunk into the earth for the purpose of locating, abstracting or using subterranean water;

“**connecting point**” means the point at which the drainage installation joins the connecting sewer;

“**connecting sewer**” means a pipe owned by the Council and installed by it for the purpose of conveying sewage from a drainage installation on a premises to a sewer beyond the boundary of those premises or within a servitude area or within an area covered by a wayleave or by agreement;

“**consumer**” means a person who is obtaining a supply of water from the Council. Where water is supplied through a single water meter to a number of persons it shall mean the person to whom the Council has agreed to supply water;

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

**“drain”** means that portion of the drainage installation which conveys sewage within any premises;

**“drainage installation”** means a system which is used for or intended to be used for or in connection with the reception, storage, treatment or conveyance of sewage on any premises to the connecting point and includes drains, fittings, appliances, septic tanks, conservancy tanks, pit latrines and private pumping installations forming part of or ancillary to such systems;

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

**“duly qualified sampler”** means a person who takes samples for analysis from the sewage disposal and stormwater disposal systems and from public waters and who has been certified to do so by an authorised officer;

**“environmental cost”** means the full cost of all measures necessary to restore the environment to its condition prior to the damaging incident;

**“flood level (1 in 50 year)”** means that level reached by flood waters resulting from a storm of a frequency of 1 in 50 years;

**“flood plain (1 in 50 year)”** means the area subject to inundation by flood waters from a storm of a frequency of 1 in 50 years;

**“high strength sewage”** means sewage with a strength or quality greater than standard domestic effluent;

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

**“owner”** means—

- (a) the person in whom from time to time is vested the legal title to premises;
- (b) in a case where the person in whom the legal title 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 or her 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;
- (e) in relation to 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;
- (f) in relation to a piece of land occupied in terms of Zulu law, the holder of a permission to occupy certificate;
- (g) person who acquires any right to land by virtue of the provisions of any law applicable in the Province of KwaZulu-Natal;

**“person”** means any natural person, local government body or like authority, a company incorporated under any law, a body of persons whether incorporated or not, a statutory body, public utility body, voluntary association or trust;

**“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);
- (b) a sectional plan registered in terms of the Sectional Titles Act, 1986 (Act 95 of 1986); or
- (c) a township plan in terms of any law of the area previously described as KwaZulu;

or a portion of such land which is not so delineated but which is connected to the sewage system or is capable of being so connected;

**“prescribed”** means prescribed by the Council by resolution from time to time;

**“public notice”** means notice in a newspaper in at least two of the official languages in general use within the area in question and, where possible, the notice shall be published in a newspaper appearing predominantly in the language utilised in the publication of the notice;

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

**“Regulations”** means the National Building Regulations made in terms of the National Building Regulations and Building Standards Act, 1977 (Act 103 of 1977);

**“sewage”** means waste water, trade effluent, standard domestic effluent and other liquid waste, either separately or in combination, but shall not include stormwater;

**“sewage disposal system”** means the structures, pipes, valves, pumps, meters or other appurtenances used in the conveyance through the sewer reticulation system and treatment at the treatment works under the control of the Council and which may be used by it in connection with the disposal of sewage and shall include the sea outfalls;

**“sewer”** means any pipe or conduit which is the property of or is vested in the Council and which may be used for the conveyance of sewage from the connecting sewer and shall not include a drain as defined;

**“standard domestic effluent”** means domestic effluent with prescribed strength characteristics in respect of chemical oxygen demand and settleable solids as being appropriate to sewage discharges from domestic premises within the jurisdiction of the Council, but shall not include trade effluent;

**“trade effluent”** means any liquid whether or not containing matter in solution or suspension which is given off in the course of or as a result of any industrial, trade, manufacturing, mining or chemical process or any laboratory, research or agricultural activity, and includes any liquid other than standard domestic effluent or stormwater;

**“trade premises”** means premises upon which trade effluent is produced;

**“wet industry”** means an industry which discharges trade effluent;

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

**1.2** Subject to the provisions of section 1.1, any word or expression used in these By-laws to which a meaning has been assigned in the National Building Regulations and Building Standards Act or the Regulations shall bear that meaning unless the context indicates otherwise.

CHAPTER 2  
GENERAL PROVISIONS

**2.1 Exceptions to application 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) An authorised officer 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.

(3) Any act performed under any By-law or regulation repealed simultaneously with the promulgation of these By-laws shall be deemed to be valid.

(4) Any permit validly granted under any By-law or regulation repealed simultaneously with the promulgation of these By-laws shall be deemed to be a permit issued under these By-laws.

(5) In respect of any permit referred to in 2.1 (4) which was granted for a period of longer than 12 months, it may be withdrawn or its conditions varied on three months written notice by an authorised officer.

(6) Notwithstanding the provisions of 2.1 (4) no person shall contravene the provisions of these By-laws.

**2.2 Agreement to provide services.**—An authorised officer may enter into an agreement with any person pursuant to which the Council will provide any service which forms part of or is ancillary to the Council's sewage disposal service.

**2.3 Provision of services to trade premises.**—Any person who wishes to construct or cause to be constructed, a building which shall be used as a trade premises, shall at the time of lodging a building plan in terms of Section 4 of the National Building Regulations and Building Standards Act also lodge applications for connection to the sewage disposal system and for permission to discharge trade effluent in terms of section 4.1 of these By-laws.

**2.4 Power to control objectionable discharge.**—(1) No person shall cause or permit any solid, liquid or gaseous substance other than stormwater to enter—

- (a) any stormwater drain, stormwater sewer or excavated or constructed watercourse;
- (b) any river, stream or natural watercourse or any public water, whether ordinarily dry or otherwise, except in accordance with the provisions of the Water Act, 1956 (Act 54 of 1956), as amended; or
- (c) any street or premises.

(2) No person shall discharge, or permit the discharge or entry into the sewage disposal system of any sewage or other substance—

- (a) which does not comply with the standards and criteria prescribed in section 4.5 or 4.17 below;
- (b) which contains any substance in such concentration as will produce or be likely to produce in the final treated effluent at any treatment works or sea outfalls discharge point or in any public water any offensive, or otherwise undesirable taste, colour or odour or any foam;

- (c) which may prejudice the re-use of treated sewage or adversely affect any of the processes whereby sewage is purified for re-use, or treated to produce sludge for disposal;
- (d) which contains any substance or thing of whatsoever nature which is not amenable to treatment to a satisfactory degree at a treatment works or which causes or is likely to cause a breakdown or inhibition of the processes in use at such works;
- (e) which contains any substance or thing of whatsoever nature which is of such strength, or which is amenable to treatment only to a degree as will result in effluent from the treatment works or discharge from the sea outfalls being unable to comply satisfactorily with any requirements of or under the Water Act, 1956 (Act 54 of 1956);
- (f) which may cause danger to the health or safety of any person or may be injurious to the structure or materials of the sewage disposal system or may prejudice the use of any ground used by the Council for the sewage disposal system, other than in compliance with the permissions issued in terms of these By-laws;
- (g) which may inhibit the unrestricted conveyance of sewage through the sewage disposal system.

(3) No person shall cause or permit any stormwater to enter the sewage disposal system.

(4) An authorised officer may, by written notice, order the owner or occupier to conduct, at his or her cost, periodic expert inspections of the premises in order to identify precautionary measures which would ensure compliance with these By-laws and to report such findings to an authorised officer.

(5) An authorised officer may by written notice order the owner or occupier of any premises to execute, at his or her own cost, any precautionary measures required by the Council to prevent any contravention of these By-laws.

(6) If any person contravenes any provision of subsection (1), and/or subsection (2) he or she shall within twelve hours, or earlier if possible, advise an authorised officer of the details of the contravention and the reasons for it.

**2.5 Notices and documents.**—(1) A notice or document issued in terms of these By-laws shall be deemed to be duly issued if it is signed by an authorised officer.

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

- (a) by delivering it to him or her personally or to his or her duly authorised agent;
- (b) by delivering it at his or her 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 or she has nominated a *domicilium citandi*, by delivering it to such *domicilium*;
- (d) if he or she has not nominated a *domicilium citandi*, by delivering it to the address given by him or her in his or her application for the use of the sewage disposal system for the reception of an account for sewage disposal charges;
- (e) in the case of a body corporate, by delivering it at the registered office or business of such body corporate;

- (f) by registered or certified post addressed to his or her 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.

**2.6 Power to issue and compliance with notices.**—(1) An authorised officer may by written notice order a person who by act or omission 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 or her by an authorised officer in terms of these By-laws within the specified period, the authorised officer may take such action or do such work as in his or her opinion is necessary to remedy the breach and restore the environment, and may recover the cost of such action from such person.

**2.7 False statements or information.**—No person shall make a false statement or furnish false information to the Council or an authorised officer, or falsify a document issued in terms of these By-laws.

**2.8 Liabilities and compensation.**—The Council shall not be liable for damages or compensation to any person as a consequence of anything done by it in terms of these By-laws.

**2.9 Full cost charges.**—Whenever any work carried out by the Council is stated in the prescribed charges to be at full cost or is, in the opinion of an authorised officer of an abnormal nature or is to be executed under exceptional circumstances, the Council shall be entitled to recover such sum as an authorised officer shall certify as being the full cost of carrying out the work, including any exploratory investigation, surveys, plans, specifications, schedules of quantities, supervision, administration charge and the use of tools and plant as well as the expenditure of labour involved in disturbing, making good and remaking any part of the street or ground affected by the work and the environmental cost.

**2.10 Penalties and charges.**—(1) Any person who—

- (a) contravenes any provisions of these By-laws; or
- (b) contravenes any conditions imposed upon the granting of any application, consent, approval, concession, relaxation, permit or authority in terms of these By-laws; or
- (c) fails to comply with the terms of any notice served upon him or her in terms of these By-laws

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, No. 25 of 1974.

(2) Failure to comply with the terms of these By-laws or with the terms of any condition or notice referred to in subsection (1) (b) or (c) above shall constitute a continuing offence and a person failing to comply with the terms of such condition or notice shall be guilty of a separate offence for each day during which he or she fails to comply with such terms.

(3) A person who commits an offence referred to in subsections (1) or (2) shall be liable, in addition to the penalties prescribed in these By-laws and any other law, to such charges as an authorised officer may assess as the full cost including the environmental cost incurred by the Council as a result of that offence.



**2.11 Right of appeal to council.**—(1) Every person who is directly affected by these By-laws shall have a right of appeal to the relevant Committee of the Council against any decision by an authorised officer or the issue of a notice by him under these By-laws.

(2) The appellant shall lodge his or her appeal by not later than 21 days of the decision in (1) above, together with written grounds of appeal.

(3) The appeal shall be lodged with an authorised officer responsible for the decision concerned, who shall state his reason for the decision within 14 days and refer both the appeal and his written reasons to the relevant Committees of the Council, which shall consider and decide the appeal in such manner as it deems proper.

(4) The written reasons of an authorised officer and the decision of the Committee shall be despatched to the appellant as soon as they are prepared.

**2.12 Repeal of regulations and By-laws.**—Any sewage or trade effluent regulations or By-laws applicable to any local government body, as defined in the Local Government Transition Act, No. 209 of 1993, and the Development and Services Board which are applicable within the area of the Council, are repealed.

### CHAPTER 3 USE OF THE SEWAGE DISPOSAL SYSTEM

**3.1 Application for use of the sewage disposal system.**—(1) Any person wishing to utilise the sewage disposal system shall make application to the an authorised officer in the form required, accompanied by such information as the Council shall require from time to time.

(2) An application for the use of the sewage disposal system granted by an authorised officer shall constitute an agreement between the Council and that person.

(3) The person referred to in 3.1 (1) shall be liable for all the prescribed charges in respect of the use of the sewage disposal system granted to him or her until the agreement referred to in subsection (1) has been terminated.

(4) Where premises have been connected to the sewage disposal system or are reasonably capable of being so connected, it shall be deemed that an agreement in terms of section (1) exists.

(5) The Council may, if it deems it expedient, require any owner to bind him or herself jointly and severally with the applicant, for the payment of any charges to become payable to the Council under these By-laws.

**3.2 Special agreements for the disposal of sewage.**—(1) The Council may enter into a special agreement for the disposal of sewage with—

- (a) a person inside the Council's area of jurisdiction, if the disposal necessitates the imposition of conditions not contained in the By-laws.
- (b) a person outside the Council's area of jurisdiction.

(2) If the Council, in terms of a special agreement, provides a means of disposal of sewage to a person outside the Council's area of jurisdiction, it may permit him or her to accept sewage for eventual disposal by the Council from other persons outside the Council's area of jurisdiction, subject to such conditions as the Council deems fit.

**3.3 Termination of agreement for use of the sewage disposal system.**—A person may terminate an agreement referred to in section 3.1 and 3.2 by giving to the Council not less than five working days notice in writing of his or her intention to do so provided that the authorised officer is satisfied with the manner in which sewage arising from the premises will be disposed of on the termination of the contract.

**3.4 Provision of a connecting sewer.**—(1) If an agreement for the use of the sewage disposal system in accordance with section 3.1 exists and no connecting sewer exists in respect of the premises, the owner or his or her agent shall immediately make application on the approved form and pay the prescribed charge for the installation of such a connecting sewer.

(2) If an application is made for use of the sewage disposal system to a premises which is so situated that it is necessary to extend the sewer in order to connect the sewage disposal system to the premises, an authorised officer may agree to the extension subject to such conditions as he or she may impose.

(3) An authorised officer may at the request of any person agree, subject to such conditions as he or she may impose, to a connection to a sewer other than that which is most readily available for the drainage of the premises; provided that the applicant shall be responsible for any extension of the drainage installation to the connecting point designated by an authorised officer and for obtaining at his or her cost, such servitudes over other premises as may be necessary.

(4) A connecting sewer provided and installed by the Council shall—

- (a) be located in a position determined by an authorised officer;
- (b) terminate at a connection point approximately 1 metre inside the premises from the boundary of the land owned by or vested in the Council or over which it has a servitude or other right or when subsection (3) applies, at the connecting point designated in terms of that subsection;
- (c) be of a size determined by an authorised officer.

(5) An owner or his or her agent shall pay the prescribed connection charge.

(6) Where an owner or his or her agent is required to provide a sewage lift as provided for in terms of the Regulations the rate and time of discharge into the sewer shall be subject to the approval of an authorised officer.

**3.5 Acceptance of sewage delivered by road haulage.**—(1) An authorised officer may, at his or her discretion, and subject to such conditions as he or she may specify, accept sewage for disposal delivered to Council facilities by road haulage.

(2) No person shall discharge into Council facilities by road haulage except with and in terms of the written permission of an authorised officer. The charges for any sewage delivered for disposal to any Council facilities shall be assessed by an authorised officer in accordance with the prescribed tariff of charges.

(3) When delivery is by road haulage—

- (a) the time of delivery shall be arranged with an authorised officer; and
- (b) the nature and composition of the sewage shall be established to the satisfaction of an authorised officer prior to the discharge thereof and no person shall deliver sewage which does not comply with the standards laid down in terms of these By-laws.

(4) Provided that fourteen days' written notice is given to the permit holder an authorised officer may withdraw any permission to discharge sewage delivered in terms of this section if the permit holder—

- (a) fails to ensure that the sewage so delivered conforms to the standards prescribed in Schedule "A" or "B", as applicable, or in the permit; or
- (b) fails or refuses to comply with any notice lawfully served on him or her in terms of these By-laws or contravenes any provisions of these By-laws or any condition imposed on him in terms of any permission granted to him or her;
- (c) fails to pay the assessed charges in respect of any sewage delivered;

## CHAPTER 4 TRADE EFFLUENT

**4.1** No person shall discharge or cause or permit to be discharged into the sewage disposal system any trade effluent except with and in terms of the written permission of an authorised officer and in accordance the provisions of this chapter.

**4.2** Application for written permission shall be made in accordance with the requirements of the Council stipulated under section 3.1 (1) above.

**4.3** A person to whom such permission is granted shall pay to the Council the prescribed charges.

**4.4** If, in the opinion of an authorised officer, the capacity of a sewage disposal system is sufficient to permit the conveyance and effective treatment and lawful disposal of the trade effluent he or she may, for such period and subject to such conditions as he or she may impose, grant written permission in terms of section 4.1.

**4.5** The person to whom permission has been granted in terms of this Chapter shall ensure that no trade effluent is discharged into the sewage disposal system unless it complies with the standards and criteria set out in Schedules “A” and “B” hereto.

**4.6** (1) An authorised officer may by writing in the permission concerned, relax or vary the standards in Schedule “A” or “B” provided that the authorised officer is satisfied that any such relaxation presents the best practicable environmental option.

(2) In determining whether relaxing or varying the standards in Schedule “A” or “B” represents the best practicable environmental option an authorised officer shall give consideration to—

- (a) whether the applicant’s plant is operated and maintained at optimal levels;
- (b) whether technology used by the applicant represents the best available to the applicant’s industry and, if not, whether the installation of such technology would entail unreasonable cost to the applicant;
- (c) whether the applicant is implementing a programme of waste minimisation which complies with national and local waste minimisation standards to the satisfaction of the authorised officer;
- (d) the cost to the Council of granting the relaxation or variation; and
- (e) the environmental impact, or potential impact, were the relaxation of variation to be granted, and in so doing shall apply a risk-averse and cautious approach.

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

**4.7** Test samples may be taken at any time by a duly qualified sampler to ascertain whether the trade effluent complies with Schedule “A” and “B” or any other standard laid down in a permit.

**4.8** An authorised officer may in the permit or at any time, by written notice, require a permit holder to—

- (1) subject the trade effluent to such preliminary treatment as in the opinion of an authorised officer will ensure that the trade effluent conforms to the standards prescribed in Schedules “A” and “B” before being discharged into the sewage disposal system;
- (2) install such equalising tanks, valves, pumps, appliances, meters and other equipment as in the opinion of an authorised officer will be necessary to

control the rate and time of discharge into the sewage disposal system in accordance with the conditions imposed by him or her;

- (3) install for the conveyance of his or her trade effluent into the sewage disposal system at a given point, a drainage installation separate from the drainage installation for waste water and standard domestic effluent and may prohibit such permit holder from disposing of his or her trade effluent at any other point and from disposing of his or her waste water and standard domestic effluent by means other than into a sewage disposal system;
- (4) construct on any pipe conveying his or her trade effluent to any sewer, a manhole and/or stop-valve in such position and of such dimensions and materials as an authorised officer shall prescribe;
- (5) provide all such information as may be required or called for by an authorised officer to enable him or her to assess the charges due to the Council in terms of these By-laws in accordance with the formula prescribed by them;
- (6) provide adequate facilities such as level or overflow detection devices, standby equipment, overflow catchpits, or other appropriate means to prevent a discharge into the sewage disposal system which is in contravention of these By-laws.
- (7) cause any meter, gauge or other device installed in terms of this section to be calibrated by an independent authority at the cost of the permit holder at times laid down by an authorised officer and copies of the calibration to be forwarded to him or her.
- (8) cause his or her trade effluent to be analysed as often and in such manner as may be prescribed by an authorised officer and provide him or her with returns of these tests when completed.

**4.9** In the event of failure or of faulty recording by the device the volume shall be assessed by such means as an authorised officer may decide.

**4.10** The cost of any treatment, plant, works or analysis which the permit holder may be required to carry out, construct or install in terms of section 4.8 shall be borne by the permit holder concerned.

**4.11** A permit holder shall obtain the written permission of an authorised officer for any proposed changes to the composition of trade effluent discharged into the sewage disposal system.

**4.12** In the event that any permit holder discharges into the sewage disposal system any trade effluent which does not comply with the permit issued in respect of that process or premises, the permit holder or his or her agent shall, within twelve hours of the discharge, notify an authorised officer of the incident and the reasons for it.

**4.13** Provided that an authorised officer shall give fourteen days written notice to the permit holder he or she may withdraw any permission to discharge trade effluent into the sewage disposal system in terms of this Chapter if the permit holder—

- (1) fails to ensure that the trade effluent so discharged conforms to the trade effluent standards prescribed in Schedules “A” and “B” of these By-laws or in the permit; or
- (2) fails or refuses to comply with any notice lawfully served on him or her in terms of these By-laws or contravenes any provisions of these By-laws or any condition imposed on him or her in terms of any permission granted to him or her; or

- (3) fails to pay the assessed charges in respect of any trade effluent discharged.

**4.14** In the event that an authorised officer withdraws permission to discharge granted in terms of section 4.1 he or she may—

- (1) in addition to any steps prescribed in these By-laws, and on fourteen days' written notice served on the permit holder, authorise the closing or sealing of the connecting sewer of the said premises to any sewer for such charge as may be prescribed in the Council's tariff of charges;
- (2) continue to refuse to accept any further trade effluent until he or she is satisfied that the permit holder concerned has taken adequate steps to ensure that the trade effluent to be discharged conforms with the standards prescribed in these By-laws. The authorised officer may then authorise the reopening of the connection or seal for such further charge as may be prescribed in the Council's tariff of charges.

**4.15** If it comes to the attention of an authorised officer that a person is discharging trade effluent which will, if allowed to continue, seriously damage the sewage disposal system or the environment, he or she may immediately authorise the sealing of the sewer connection through which the trade effluent is being discharged. No person shall permit the opening of that connection until an authorised officer is satisfied that the trade effluent will comply with the prescribed standards.

**4.16** The provisions of section 4.3 to 4.15 in regard to the discharge of trade effluent into the sewage disposal system shall apply equally to trade effluent discharged into any of the Council's sea outfalls, subject, however, to the following provisions specifically in regard to discharge into sea outfalls—

- (1) Where trade effluent is accepted for discharge into a sea outfall it shall be delivered to the point of acceptance approved by an authorised officer by means of a pipeline constructed and maintained by the permit holder at his or her expense.
- (2) No trade effluent shall be accepted for discharge into a sea outfall unless it complies with the standards and criteria set out in Schedule "B".
- (3) trade effluent shall not be accepted for discharge into a sea outfall unless it, whether alone or in combination with other substances, can be demonstrated to the satisfaction of an authorised officer, not to—
  - (a) be toxic to marine fauna or flora;
  - (b) contain any other constituents in concentrations which can create a nuisance on the beaches or in the sea, or a health hazard or which may have an adverse effect on bathing or other recreational areas;
  - (c) contain any floating material;
  - (d) contain any substance which may be prejudicial or injurious to the Council's sea outfalls and associated sumps, sewers, plant and equipment or to its employees;
  - (e) contain any materials capable of creating a nuisance by frothing; and
  - (f) contain any standard domestic effluent.
- (4) An authorised officer may by writing in the permission concerned, relax or vary the standards and criteria in Schedule "B", but subject always to (3) above.
- (5) The delivery pipeline from the premises concerned to the point of acceptance shall be maintained in a proper condition and free from all leaks.

- (6) Acceptance of the trade effluent shall be subject to periodic review; provided that such review may be made at any time if in the opinion of an authorised officer special circumstances such as pollution of the sea or beaches, the killing of fish or other incidents, arise as a result of the acceptance thereof into a sea outfall.
- (7) A suitable sampling point to the satisfaction of an authorised officer shall be provided by the permit holder of a permit issued in terms of section 4.1 in respect of the trade premises concerned.
- (8) An authorised officer shall be notified of any proposed change in the process of manufacture or in the quantity or nature of the materials used which is likely to affect the nature, composition or quantity of the trade effluent discharged and his or her permission for the continued discharge of such effluent shall be obtained.

## CHAPTER 5 PAYMENT FOR SERVICES

**5.1 Payment for use of sewage disposal system.**—(1) Payment for the use of the sewage disposal system shall be made by either—

- (a) a sewage rate levied in terms of section 150 (1) of the Local Authorities Ordinance, No. 25 of 1974 for each category of rate code; or
- (b) the prescribed tariff rates for the disposal of sewage; or
- (c) a special agreement entered into between the Council and a person in terms of section 3.2 (1); or
- (d) some other means as prescribed by the Council from time to time.

(2) Payment shall become due and payable on the due date stipulated in the account.

**5.2 Trade effluent charge when sewage rates applied.**—When the charge for the use of the sewage disposal system is by means of sewage rates and a person holds a permit for the discharge of trade effluent in excess of the prescribed minimum volume of ‘T’ kilolitres per month the permit holder will be liable to charges in addition to that levied by means of sewage rates, calculated in accordance with section 6.3.

**5.3 Calculation for the additional charge for trade effluent.**—The rate per kilolitre for the additional charge for the disposal of trade effluent to the sewage disposal system shall be determined in accordance with the formula—

$$X + V \left( \frac{C}{R} \right) + Z \left( \frac{B}{S} \right)$$

where—

- (a) ‘X’ is the prescribed rate for the conveyance and preliminary treatment of sewage and shall include all operational, repair, maintenance and annual capital costs less an allowance, determined by an authorised officer, in respect of the contribution made to the sewerage account by those industries who discharge a trade effluent via their payment of rates;
- (b) ‘V’ is the prescribed rate for the treatment in the treatment works of the Council of standard domestic effluent having a prescribed chemical oxygen demand value and shall include all operational, repair, maintenance and annual capital costs;
- (c) ‘R’ is the prescribed chemical oxygen demand value referred to in (b);

- (d) 'Z' is the prescribed rate for the treatment in the treatment works of the Council of standard domestic effluent having a prescribed settleable solids value and shall include all operational, repair, maintenance and annual capital costs;
- (e) 'S' is the prescribed settleable solids value referred to in (d) as expressed in millilitres per litre;
- (f) 'C' is the chemical oxygen demand being the value of the amount of oxygen, from potassium dichromate, that reacts with the oxidizable substances contained in one litre of the settled trade effluent as expressed in milligrams per litre;
- (g) 'B' is the volume to the nearest millilitre of settleable matter in one litre of the trade effluent, measured after settlement in the laboratory for one hour.

**5.4 Sewage disposal charge when a tariff rate is applied.**—When a charge for the use of the sewage disposal system is by means of prescribed tariff rates, charges for standard domestic effluent shall become payable by the consumer when—

- (1) a premises is connected to the sewage disposal system or is reasonably capable of being so connected, and
- (2) a premises receives a supply of water from the Council.

**5.5 Trade effluent charge when tariff rates applied.**—(1) Any person who holds a permit for the discharge of trade effluent in excess of the prescribed minimum volume of 'T' kilolitres per month shall be liable for a minimum charge per kilolitre of trade effluent which is equivalent to the charge for the disposal of standard domestic effluent.

(2) In addition, a permit holder who discharges a trade effluent with a strength or quality greater than standard domestic effluent shall be liable for an additional charge in respect of high strength sewage calculated in accordance with section 5.6.

**5.6 Calculation for the additional charge for high-strength sewage.**—The rate in cents per kilolitre for the additional charge for the disposal of high-strength sewage to the sewage disposal system shall be determined in accordance with the formula—

$$V \left( \frac{C}{R} - 1 \right) + Z \left( \frac{B}{S} - 1 \right)$$

where V, C, R, B, Z and S are as defined in section 5.3.

**5.7 Determination of values for C and B.**—(1) Values for C and B shall be determined by an authorised officer in accordance with such methods of chemical analysis as he or she may deem proper having regard to the nature of the sewage to be analysed and details of such methods and the results obtained shall be kept available for a period of twelve months for inspection by the permit holder of the premises from which the sewage emanated.

**5.8 Volume of Standard Domestic Effluent Determined for Payment Purposes.**—The volume of standard domestic effluent shall be determined—

- (1) by a percentage of water supplied by the Council in accordance with procedures prescribed from time to time; provided that where an authorised officer is of the opinion that the percentage so applicable in respect of specific premises is excessive, having regard to the purposes for which water is consumed on those premises, he may reduce the percentage applicable to those premises to a figure which, in his or her opinion and in the light of information then available, more realistically reflects the proportion between

the likely volume of sewage discharged from the premises and the quantity of water supplied thereto; or

- (2) on an assessment made by an authorised officer based on criteria such as the number of employees at a premises, the number of shifts worked, number of meals served and the like; or
- (3) where premises are supplied with water from a source in addition to the Council's water supply system, by river abstraction or partially or wholly by a borehole, on an assessment made by an authorised officer based on such criteria as he or she deems relevant.

**5.9 Volume of trade effluent determined for payment purposes.**—Volume of trade effluent discharged into the sewage disposal system or to sea outfalls shall be determined by—

- (1) Where direct measurements of the volume of trade effluent discharged from a premises are made this volume shall be used for the purposes of calculating the amount payable.
- (2) Where no direct measurement of the volume of trade effluent discharged from the premises are made then this volume will be determined as a percentage of water supplied by the Council in accordance with procedures prescribed from time to time.
- (3) Where premises are supplied with water from a source in addition to the Council's water supply system, by river abstraction or partially or wholly by a borehole, the volume of trade effluent discharged shall be assessed by an authorised officer based on such criteria which he or she deems relevant.
- (4) Where a portion of the water supplied to a permit holder forms part of the end product of any manufacturing process or is lost by reaction or evaporation during the manufacturing process or for any other reason, an authorised officer shall be entitled in his or her sole discretion on application by the permit holder, to reduce the assessed volume of trade effluent.

**5.10 Other charges.**—Notwithstanding anything to the contrary in these By-laws, the Council may prescribe and levy the following charges—

- (1) A charge payable by any person in respect of a minimum volume of sewage;
- (2) a charge payable by any person in the form of a general surcharge on the prescribed tariff rates for use of the sewage disposal system should there be any prohibition or restriction in the consumption or use of water;
- (3) a charge for the recovery of costs incurred by the Council for trade effluent control and monitoring of permit holders who dispose of trade effluent into the sewage disposal system;
- (4) a charge payable by a person who disposes of an objectionable discharge as referred to in section 2.4 for the recovery of full costs incurred by the Council in tracing the source of such objectionable discharge and in remedying the effects thereof. Such full cost shall include the environmental cost.
- (5) a charge payable by any person at the applicable prescribed tariff rate or at full cost for any other service rendered or goods sold.

**5.11 Payment of deposit.**—(1) An authorised officer may require any person to deposit with the Council a sum of money representing the cost of sewage disposal charges which in his or her opinion would be incurred by the a person during a period specified by the Council:



Provided that an authorised officer may on written application by a person accept from him or her a guarantee to his or her satisfaction in lieu of the sum of money concerned.

(2) A deposit or guarantee contemplated in subsection (1) shall accompany the application submitted in terms of sections 3.1 or 4.1.

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

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

(5) An authorised officer may, of his or her own accord or at the request of a consumer, reduce the amount of a deposit or a guarantee required by him or her if he or she is satisfied that the reduction is justified by the present level of sewage disposal charges 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 3.3, any amount is outstanding in respect of sewage disposal charges to a consumer, an authorised officer 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) After an agreement referred to in section 3.1 or 3.2 has been terminated, a deposit shall become forfeited to the Council if it has not been claimed within twelve months of the termination.

**5.12 Reduction of amount payable if water wasted or leakage undetected.**—A person shall be entitled to a reduction to the amount payable for the disposal of sewage in the event that the water meter readings upon which the charge is calculated include any period during which water was wasted or a leakage was undetected if the consumer demonstrates to the satisfaction of an authorised officer that the said water was not discharged into the sewage disposal system.

The amount payable for the disposal of sewage shall be reduced by an amount based on the volume of standard domestic effluent calculated from the volume of potable water lost through leakage or wastage during the leak period.

The leak period shall be either the metering period immediately prior to the date or repair of the leak or the metering period during which the leak is repaired, whichever results in the greater reduction of the amount payable. A metering period is the time interval between two successive meter readings.

The volume of lost water shall be calculated as the consumption for the leak period less an average consumption, based on the preceding three months, for the same length of time. In the event of no previous consumption history existing, or if the average consumption is not considered representative by the authorised officer, the average water consumption will be that amount determined by him, or her, after due consideration of all relevant information. There shall be no reduction of the amount payable as a result of a loss of water directly or indirectly caused by or resulting from—

- (i) subsidence or landslip;
- (ii) refilling of swimming or other pools or ponds whether following leakage or otherwise;
- (iii) the deliberate act of the Insured or any person acting on his behalf if such act results in loss of water;

- (iv) water installations that do not conform to the Waterworks By-laws of the authority.

**5.13 Amendments to the amount payable.**—If for any reason a person liable under these By-laws is not charged at all or is charged for sewage at a rate lower than that for which he or she is liable, he or she shall not be absolved from payment, and shall remit all sums due to the Council calculated in accordance with the provisions of this Chapter, on demand.

**5.14 Amendments to the prescribed charges.**—Where amendments to the prescribed tariff rates for disposal of sewage become operative on a date between meter readings, the consumer shall pay charges calculated on the same quantity of sewage as was disposed of in each period of twenty-four hours during the interval between meter readings.

## CHAPTER 6 THE DRAINAGE INSTALLATION

**6.1 Drains in streets or public places.**—No person shall for the purpose of conveying sewage derived from whatever source, lay or construct a drain on, in or under a street, public place or other land owned by, vested in, or under the control of the Council, or other local authority within the Council's area of jurisdiction, except with the prior written permission of an authorised officer and subject to such conditions as he or she may impose.

**6.2 Council and owner may agree to construction by Council.**—The Council may agree with the owner of any premises that any drainage work which such owner desires, or is required to construct in terms of these By-laws or the Regulations, shall be constructed by the Council, and the full cost of such construction as certified by an authorised officer shall be paid by such owner to the Council, either in advance or on demand.

**6.3 Maintenance of drainage installation.**—(1) Should the owner or occupier of any premises fail to provide a drainage installation together with a sewer connection or fail to keep the drainage installation upon such premises in proper working condition the Council may itself carry out the necessary work and recover the full cost thereof from the owner or occupier.

(2) Any person who requests that the drainage installation be cleared by an authorised officer shall pay the prescribed tariff for the work carried out.

(3) An authorised officer may, on the written application of the owner or occupier of any premises, inspect and test the drainage installation of such premises or any section thereof and recover from the owner or occupier the cost of such inspection and test, calculated at the rate specified in the prescribed tariff of charges.

**6.4 Installation of pretreatment facility.**—An authorised officer may require that new premises shall be provided with a minimum pretreatment facility of a type specified by him or her prior to that premises being connected to the sewage disposal system.

**6.5 Power of Entry and Inspection.**—(1) An authorised 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, take samples, make such inspection, examination and enquiry and carry out work as he or she may deem necessary, and for those purposes operate any component of the drainage installation. No person shall refuse access to, interfere with, hinder or obstruct any such officer in the carrying out of his or her duties.

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

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

(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 proved, the Council shall bear the expense connected therewith together with that of restoring the premises to its former condition. In all other circumstances the owner of the premises shall bear such expense.

**6.6 Protection from ingress of floodwaters.**—Where a premises is situated in the 1 in 50 year flood plain the top level of manholes, inspection chambers and gullies is to be above the 1 in 50 years flood level, except, in the case of manholes and inspection chambers, where the cover is secured in place by approved means.

## CHAPTER 7 THE SEWAGE DISPOSAL SYSTEM

**7.1 Trespassing on the sewage disposal system.**—Except with the prior authority of an authorised officer no person shall enter—

- (1) upon an area used for the purpose of the sewage disposal system which is enclosed by a fence or where entry is prohibited by notice boards; or
- (2) a structure used by the Council in connection with its sewage disposal system.

**7.2 Interference with the sewage disposal system.**—Except with the prior authority of an authorised officer—

- (1) no person shall interfere or tamper with the sewage disposal system, except as provided in section 7.6;
- (2) no person shall make a connection to the sewage disposal system save as contemplated in section 3.4;
- (3) no person shall construct a building or raise or lower the ground level within an area that is subject to a sewer servitude.

**7.3 Damage to sewage disposal system.**—(1) No person shall damage or endanger the sewage disposal system, or cause or permit it to be damaged or endangered.

(2) Any person who intends performing work which may cause damage to the sewage disposal 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 an authorised officer if any part of the sewage disposal system is situated on the land.

(3) If work which in the opinion of an authorised officer could damage or endanger the sewage disposal system is to be performed or is being performed on land referred to in subsection (2), or on land adjacent thereto, he or she 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.

**7.4 Consequential maintenance of sewers.**—Whenever a sewer is damaged or becomes obstructed or in need of repair as a result of the act or omission of any person,

whether by reason of the failure of such person to comply with the requirements of these By-laws or otherwise, the Council shall be entitled to carry out such work of maintenance or repair as an authorised officer considers necessary or to remove the obstruction at the expense of such persons and to recover from him or her the full cost of doing so.

**7.5 Obstruction of access to sewage disposal system.**—(1) No person shall prevent or restrict access to the sewage disposal system.

- (2) If a person contravenes subsection (1), an authorised officer may—
- (a) by written notice require the person to restore access at his or her own cost within a specified period; or
  - (b) if he or she is of the opinion that the situation is a matter of urgency, without prior notice restore access and recover the full cost of doing so from the person.

**7.6 Work by private persons.**—The Council or its Agents shall lay all sewers and connecting sewers unless it elects not to do so in which case the work shall be executed in accordance with the Council's Conditions of Contract applicable to the work and the following provisions—

- (1) Any persons carrying out such work in terms of this section shall prior to commencement of such work lodge with an authorised officer a written indemnity to his or her satisfaction indemnifying the Council against all liability in respect of any accident or injury to persons or loss or damage to property which may occur as the direct or indirect result of the execution of such works.
- (2) Where a connection is to be made with any sewer it shall be made at a point indicated by an authorised officer.
- (3) Whenever the surface of any street or road has been disturbed in the course of such work, the restoration of such surface shall be undertaken solely by the Council at the expense of the person carrying out such work. Prior to the disturbance of the surface of such street or road a deposit shall be made by such person with the Council which in the opinion of an authorised officer is sufficient to cover the estimated cost of such restoration. When the actual cost is greater or less than the amount deposited any excess shall be recoverable from such person and any balance shall be refunded to him or her.
- (4) All work shall be carried out in accordance with the requirements, and to the satisfaction of an authorised officer.

## **SCHEDULE A**

### **ACCEPTANCE OF TRADE EFFLUENT FOR DISCHARGE INTO THE SEWAGE DISPOSAL SYSTEM**

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

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

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

GENERAL QUALITY LIMITS	LARGE WORKS	SMALL WORKS	UNITS
	> 25 Mℓ/d	< 25 Mℓ/d	

1.	Temperature (°C)	< 44°C	< 44°C	Degrees Celcius
2.	pH	6 < pH < 10	6,5 < pH < 10	pH units
3.	Oils, greases, waxes of mineral origin	50	50	mg/l
4.	Vegetable oils, greases, waxes	250	250	mg/l
5.	Total sugar and starch (as glucose)	1 000	500	mg/l
6.	Sulphates in solution (as $SO_4^{2-}$ )	250	250	mg/l
7.	Sulphides, hydrosulphides and polysulphides (as $S^{2-}$ )	1	1	mg/l
8.	Chlorides (as $Cl^-$ )	1 000	500	mg/l
9.	Flouride (as $F^-$ )	5	5	mg/l
10.	Phenols (as phenol)	10	5	mg/l
11.	Cyanides (as $CN^-$ )	20	10	mg/l
12.	Settleable solids	Charge	Charge	mg/l
13.	Suspended solids	2 000	1 000	mg/l
14.	Total dissolved solids	1 000	500	mg/l
15.	Electrical Conductivity	—	400	mS/m
16.	Anionic Surfactants	—	500	mg/l
17.	C.O.D.	Charge	Charge	mg/l

#### Heavy Metal Limits

18.	Copper (as Cu)	50	5	mg/l
19.	Nickel (Ni)	50	5	mg/l
20.	Zinc (Zn)	50	5	mg/l
21.	Iron (Fe)	50	5	mg/l
22.	Boron (B)	50	5	mg/l
23.	Selenium (Se)	50	5	mg/l
24.	Manganese (Mn)	50	5	mg/l
25.	Lead (Pb)	20	5	mg/l
26.	Cadmium (Cd)	20	5	mg/l
27.	Mercury (Hg)	1	1	mg/l
28.	Total chrome (Cr)	20	5	mg/l
29.	Arsenic (As)	20	5	mg/l
30.	Titanium (Ti)	20	5	mg/l
31.	Cobalt (Co)	20	5	mg/l
TOTAL METALS		100	20	mg/l

#### SPECIAL LIMITATIONS

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

#### SCHEDULE B

ACCEPTANCE OF TRADE EFFLUENT FOR DISCHARGE INTO SEA OUTFALLS

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

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

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