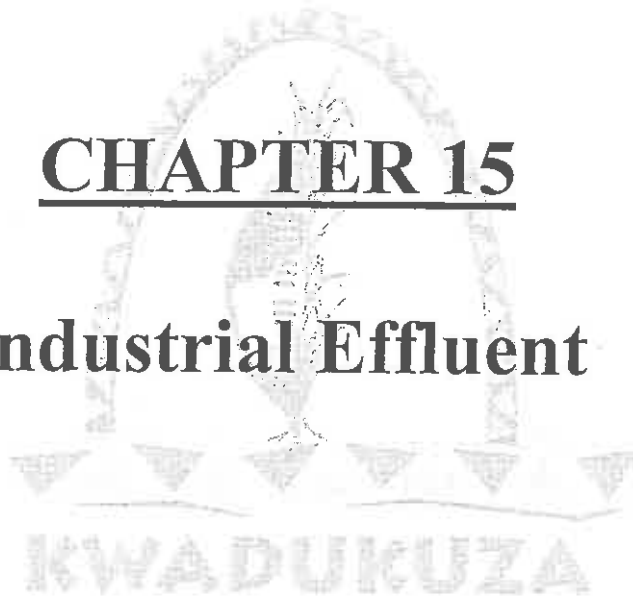


Final Draft for consideration by Council



CHAPTER 15

Industrial Effluent





KWADUKUZA MUNICIPALITY

BYLAWS RELATING TO INDUSTRIAL EFFLUENT

The Kwadukuza Municipality in terms of section 156(2) of the Constitution of the Republic of South Africa Act 1996, (Act 108 of 1996) read with section 13 of the Local Government: Municipal Systems Act (Act 32 of 2000), publishes the bylaw as set forth hereafter as bylaws made by the Municipality which bylaw will come into effect on the first day of the month following the date of publication hereof.

1. Definition

In these bylaws, unless the context otherwise indicates-

"building regulations" means the National Building Regulations and Building Standards Act 1977 (Act 103 of 1977), as amended from time to time.

"Municipality" means the Kwadukuza Municipal Council and includes the Mayor, Political Office Bearers, Political Structures, Municipal Manager and any Official who has delegated powers in terms of Section 59 of the Local Government Municipal Systems Act (Act 32 of 2000);

"cycle" any period of six months commencing on the first day of January of the first day of July in any year or as determined by the Municipality;

"domestic purposes" means-

- (a) the use of any water closet, urinal or ablution facilities;
- (b) the use of a domestic kitchen, or a café, cafeteria, canteen or restaurant, or
- (c) the use of domestic laundering facilities for non-commercial purposes;

"fixed date" means the date corresponding numerically to and/or three months after the date on which this bylaw is promulgated.

"industrial effluent" means any liquid, whether containing matter in suspension or not, which is given off in the course of, or as the result of-

- (a) any activity other than for domestic purposes, undertaken on trade or industrial premises, and shall include the cleansing of equipment and premises itself, and
- (b) the use of any premises mentioned in paragraph (a) where two or more persons are involved or in any case which is not dealt with in paragraph (a);

"Municipal Manager" means the person contemplated by Section 82 of the Local Government Municipal Structures Act 1998 (Act 117 of 1998).



"Occupier in relation to any premises means –

- (a) the person managing or controlling any business conducted on such premises, or the principal, superintendent or other person charged with the supervision of any institution, including any charitable, educational or similar institution, carrying on any process, handicraft or industry on such premises, or
- (b) in the case of any premises mentioned in paragraph (a) where two or more persons are involved or in any case which is not dealt with in paragraph (a) or in which the address of the person referred to therein is not known to the Municipality, the owner of such premises;

"owner" means:

- (a) the person in whom the legal title of the premises is vested from time to Municipality time.
- (b) in any case where the person referred to in paragraph (a) above is insolvent or dead or is under any form of legal disability whatsoever, the person in whom the administration of and control of such premises is rested as curator, trustee, executor, administrator, judicial manager, liquidator or other legal representative.
- (c) in any case where Municipality is unable to determine the identity of the owner, any person who is entitled to the benefit of the property concerned.

"parameters" means the measures and criteria listed in section 5 which are used to determine whether sewage or industrial effluent is permitted to be discharged into a sewer;

"premises" means any land separately owned, together with any buildings thereon;

"sewage" means soil water, waste water or industrial effluent, discharged either separately or together, whether or not the discharge of such effluent has been approved or whether it is accidental or deliberate;

"sewerage" means the conduits and appurtenances used for conveying sewage, including domestic water;

"engineer" means the duly authorised engineer of the Kwadukuza Municipality any other person lawfully acting in that capacity, and any employee of the Municipality duly authorised by such Municipality or person so acting, and

"tariff sample" means a sample which is taken in accordance with section 4(d).



2. Application of bylaws

This bylaw shall be additional to, and not substitution for, any other bylaw promulgated by the Municipality.

3. Consent required to discharge industrial effluent

- (1) As from the fixed date no person shall without the prior written consent of the Municipality -
 - (a) discharge or cause or permit the discharge of industrial effluent directly or indirectly into any sewer, or
 - (b) increase or cause or permit to be increased the quantity or vary or cause or permit to be varied the nature, content or composition of any industrial effluent so discharged.
- (2) Every person requiring the Municipality's consent in terms of subsection (1) of this section shall apply for such consent on the form obtainable from the town engineer-
 - (a) on or before the fixed date in the case of industrial effluent in existence immediately prior to the fixed date;
 - (b) when a application form or plans are submitted to the Municipality in terms of the building regulations in the case of any discharge of or increase or variation in industrial effluent which will result from the erection of a building for which such form or plans are required, unless such form or plans were submitted prior to the fixed date, and
 - (c) not less than one month prior to the commencement of the discharge of or increase or variation in industrial effluent in any other case, and shall provide such plans, diagrams, samples and additional information as the town engineer may require.
- (3) Any person who discharges or causes or permits to be discharged industrial effluent into the sewer without having first obtained permission in terms of subsection (1) of this section shall be guilty of an offence and liable, in addition to the penalties prescribed by this bylaw, to such charge as the Municipality may assess for the conveyance and treatment of the effluent so discharged.
- (4) The Municipality may refuse to approve, or require the amendment of, any application form or plans referred to in subsection (2)(b) of this section if it is of the opinion that such form or plans conflict in any way with, or are calculated to lead to any term, condition, restriction or requirement imposed in terms thereof.



- (5) Notwithstanding the provisions of subsection (1) of this section but subject to the remaining provisions of this bylaw, any discharge of industrial effluent in existence immediately prior to the fixed date may, if an application to continue such discharge, has been submitted in accordance with subsection (2)(a) of this section, continue as it exists at the time until such time as the Municipality has notified the applicant in writing of its decision regarding such application.

4. Industrial effluent charges

- (1) Whether or not the Municipality has granted its consent for any discharge of industrial effluent as referred to in section 3(1), the occupier of any premises from which such discharge takes place shall, in addition to any other charges provided for in this bylaw or in any other law, pay to the Municipality a charge calculated in accordance with the provisions of this bylaw in respect of each cycle, commencing with the first complete cycle to run after the fixed date, during which such discharges takes place, the said charge due and payable within thirty days of the Municipality 's rendering an account therefore

- (2) (a) The said charge shall, subject to the succeeding provisions of this section, be the amount calculated according to the following formula

$$C = A + V \frac{Ct}{100} \left(1 + \frac{COD}{600} \right)$$

C is the amount in rand due to the Municipality per cycle

A is fixed charge for the acceptance and conveyance of the industrial effluent, as determined by the Municipality from time to time.

V is the total volume of industrial effluent in kl discharged from the premises during the cycle concerned;

Ct is the basic cost of sewerage and sewage treatment (expressed in cents per kl) as determine by the Municipality from time to time as recommended by the Town Engineer, and

COD is the chemical oxygen demand, expressed in mg/l, of samples collected by any duly appointed representative of the Municipality in such a manner and at such times during a cycle as may be laid down by the Municipality, acting on the advice of the Engineer, and the Municipality shall base the charge payable on the average COD of such samples. However, if the said COD is less than 600mg/l, the average shall be taken to be equal to 600mg/l.

- (b) In the event of repeated failure to comply with the terms of this bylaw, the Municipality shall have the right to cancel its consent given in terms of section 3 and refuse to accept into its sewerage system any industrial effluent from the occupier's premises until it is satisfied that suitable measures have been taken by the occupier to prevent



contravention of the terms of such consent given in terms of section 3 of this bylaw.

- (c) Any costs incurred as a result of such disconnection from or reconnection to the municipal sewerage system shall be borne by the occupier.
 - (d) Should the effluent fail to comply with the chemical limits prescribed in section 5 of this bylaw, the monthly account shall be surcharged by an amount of five percent for each chemical limit exceeded during the month.
 - (e) The Engineer may direct that the formula referred to subsection (2)(a) of this section be dispensed with in any case where he is of the opinion that the method for calculating the charge in respect of industrial effluent specified in such formula will not adequately reimburse the Municipality for the costs incurred by the Municipality in receiving effluent into the municipal sewerage system.
 - (f) The Engineer may by notice in writing require the occupier of any premises to provide him with such information, access or facilities as he may deem necessary for the accurate calculation of the amount payable in respect of such premises.
 - (g) The Engineer shall, after applying the above principles in so far as it is possible, assess the charge due at such amount as he may deem equitable in any case where-
 - (i) the formula referred to in subsection (2)(a) of this section is being dispensed with;
 - (ii) any discharge commences during a cycle or a period of measurement, and
 - (iii) any contravention of or failure to comply with any provision of this bylaw has taken place and as a result of such contravention or failure the charge due in respect of the premises concerned can not be calculated accurately.
- (3) Should the Municipality have developed a special treatment or disposal facility for a particular industry or group of industries, the formula referred to in subsection 2(a) of this section shall not be used, but a separate tariff will be applied to cover all transportation, treatment or disposal costs applicable to the special project as provided for in the Municipality's tariff of charge.
- (4) The occupier of any premises shall, if he so requests, before any sample taken at the premises is removed therefrom be supplied with one half of such sample.



- (5) The Engineer shall determine the total amount of industrial effluent discharged from the premises during each cycle and shall, for the purposes of such determination -
- (a) in any case in which industrial effluent and other sewage are measured together, make such allowance as he may deem equitable for such other sewage;
 - (b) in any case in which the amount of sewage or industrial effluent discharged from the premises is not directly measured-
 - (i) base such determination on the amount of water used at the premises during the cycle concerned, after making such allowance as he may deem equitable in respect of water used for domestic purposes or irrigation, water lost to the atmosphere or water present in the articles produced at the premises, and
 - (ii) and if industrial effluent is discharged from the premises at more than one point, allocate the said amount of water to the points of discharge as accurately as is possible;
 - (c) in any case in which a measuring device is read on dates not corresponding with the end or commencement of a cycle, allocate the period to which the measurements relate to the cycle within which the greater portion of such period falls or, if any such period fall equally within two cycles, to such cycle as he deems most appropriate;
 - (d) in any case in which a measuring device is proved to be defective but subject to the provisions of subsection (2)(g) of this section, make due allowance for such defect, and
 - (e) in any case in which the discharge commence during a cycle, determine the date on which such discharge shall be deemed to have commenced.
- (6) The Engineer may direct that the formula referred to in subsection(2)(a) of this section be dispensed with in any case in which he is of the opinion that the method of evaluating the strength of industrial effluent specified in such formula does not reflect the strength of the effluent concerned accurately

5. Prohibited discharge into sewers

- (1) No person shall discharge or cause or permit to be discharged any storm-water or other substance which is not sewage directly or indirectly into any sewer.



- (2) No person shall discharge or cause or permit to be discharged directly or indirectly into any sewer any sewage which-
- (a) has a temperature exceeding 43°C;
 - (b) has a pH value of less than 5,5 or more than 11,0;
 - (c) contains calcium carbide or sodium sulphate;
 - (d) contains any substance which gives off or produces or is liable to give or produce explosive, inflammable, poisonous or offensive gases or vapours;
 - (e) contains any substance which has an open flash point of less than 93°C;
 - (f) contains any volatile, inflammable solvents or organic solvents immiscible with water, and
- (3) Notes on limits laid down in subsection (3)(a) to (d) of this section
- (i) Samples taken shall be tested by using the methods laid down in the "Regional Standards for Industrial Effluents - Methods of Testing" promulgated in Government Notice R.3208 dated 29 August 1969, as amended. Where specific methods of testing are not quoted in the above-mentioned Government Notice, the methods used shall be those laid down in the latest edition of "Standard Methods for the examination of Water and Waste Water" published jointly by the American Public Health Association, the American Water Works Association and the Water Pollution Control Federation.
 - (ii) "total sulphates" includes all sulphur-containing materials that yield sulphates on oxidation in an acid medium, included are sulphides, sulphuric acid, sulphonates, etc.
 - (iii) "total cyanides" includes all cyanide-containing materials that yield cyanides on hydrolysis. Includes are ferri-cyanides and Ferro-cyanides.
 - (iv) "total sulphides" includes all substances that yield sulphides on hydrolysis. Included are hydrosulphides and polysulphides.
 - (v) "total phenols" includes all ortho-, meta- and parasubstituted phenols.
 - (vi) Substances soluble in toluene are substances that can be absorbed by toluene in an acidic medium.
 - (vii) Substances soluble in petroleum spirit 40oC/60oC are substances that can be absorbed by petroleum spirit in an acidic medium.
- (4) Industrial effluent shall be discharged into the municipal system, containing any substances which may, in the opinion of the Engineer, by itself or in combination with any other substances-
- (a) cause a nuisance to the public or any section thereof;
 - (b) endanger the health of or injure any person, whether employed by the Municipality or not;



- (c) injuriously affect any sewer or sewage works or any works or land connected with any sewer, or with the conveyance, treatment, purification, disposal or re-use of sewage, and
 - (d) in any way prejudices the disposal or re-use of sewage after treatment or purification or which may lead to an effluent which does not meet any requirement imposed in term of the Water Act, 1956 (Act 54 of 1956), as amended.
- (5)
- (a) No person shall discharge or cause or permit to be discharged any industrial effluent directly or indirectly into any sewer from any premises on which such a separate system has been provided except through such separate system.
 - (b) The Municipality may, for such period and subject to such terms and conditions as it may deem fit, including the payment of any additional costs incurred by the Municipality in so doing, the provision of security and the indemnification of the Municipality, permit any discharge prohibited by the proceeding provisions of this bylaw.
- 6. Discharge into public drains and water-courses**
- (1) No person shall after the fixed date discharge or cause or permit to be discharged any substance other than storm-water into any public drain, river, stream, or other water-course.
 - (2) The Municipality may, for such period and subject to such terms and conditions as it may deem fit, permit any discharge prohibited by subsection (1) of this section; provided that every substance discharged in terms of this subsection shall comply with the "General Standard" laid down in section 2 of the "Regional Standards for Industrial Effluents" promulgated under Government Notice R.553 date 5 April 1962, as amended.
 - (3)
 - (a) subject such industrial effluent to such treatment as will, in its opinion, ensure that it at all times complies with the requirements of section 5;
 - (b) discharge such industrial effluent only during specified hours, at a specified rate or at a volume or strength which does not exceed a specified maximum, and
 - (c) discontinue or reduce the discharge of any industrial effluent which, in the Municipality's opinion, requires special treatment by reason of its volume or strength.
 - (4) The Municipality may in order to properly assess any charge provided for in this bylaw or for the purposes of giving effect to or ensuring due and proper compliance with any of the provisions of this bylaw or of any provision, condition, restriction or requirement imposed in terms thereof, install and maintain on any premises at the cost of the owner of such premises any meter, gauge or sampling or other device for ascertaining the volume, composition or strength of or obtaining samples of any sewage or other substance discharged



from such premises or any portion thereof directly or indirectly into any sewer, public drain, river, stream or other water-course or for ascertaining the volume of water supplied to or consumed on such premises or any portion thereof.

- (5) The Municipality may, in addition to any other powers conferred upon it under this bylaw, by notice in writing require the owner of any premises on or in connection with which a contravention of or failure to comply with any provision of this bylaw or any provision, condition, restriction or requirement imposed in terms thereof has taken place or is taking place, to rectify such contravention or to comply with such provision, condition, such notice, and the Municipality may, upon any failure by such owner to comply fully with the requirements of such notice
- (a) itself give effect to the requirements of such notice at the cost of such owner;
 - (b) at the cost of such owner seal off or block any point of discharge from such premises if such point of discharge is being used in connection with such contravention or failure or if any substance connected therewith is being discharged through such point of discharge, whether or not such point is also being used for lawful purposes or to discharge any substance which may lawfully be discharged, and
 - (c) withdraw any consent in connection with which such contravention or failure is taking place or has taken place.
- (6) The Municipality is, without prejudice to any other power or legal remedy available to it, entitled to recover all costs and expenses incurred by it as the direct or indirect result of damage caused to any sewer, sewage works, public drain, river, stream or water course or to any works or land connected with any such sewer, sewage works, public drain, river, stream or water course by virtue of the discharge therein of any industrial effluent or of any substance the discharge whereof is prohibited, or as the direct or indirect result of any injury caused to any person caused by such discharge, from the person who discharged or caused the discharge of such effluent or substance or, at the discretion of the Municipality, from the owner or occupier of the premises from which such effluent or substance was discharged.

7. Maintenance of traps and the like

The occupier of premises on which any structure, chamber, tank, trap, meter, gauge, device or other apparatus has been erected or installed in terms of this bylaw or of any other bylaw promulgated by the Municipality in connection with any discharge in any sewer, drainage pipe, river, stream or other water-course or in connection with any charge provided for in this bylaw, other than any such structure, chamber, tank, trap, meter, gauge, device or other apparatus which has been erected or installed and is being maintained by the



Municipality, shall keep such structure, chamber, tank, meter, trap, gauge, device or other apparatus free of any blockage and shall maintain and keep it clean so that it operates efficiently at all times.

8. Presumption

The occupier of premises shall, for the purposes of this bylaw, be deemed to be the person discharging any sewage or substance discharged from such premises.

9. Offences and Penalties

Any person who fails to comply with or contravenes any section of this bylaw shall be guilty of an offence and shall upon conviction be liable to a fine determined by the Magistrate from time to time or imprisonment as a court with jurisdiction may determine upon conviction.

10. Repeal of bylaws

All Municipal Bylaws, and amendments thereto, relating to Industrial Effluent made by the local authorities of Nkwazi/Zinkwazi Beach Transitional Local Council, KwaDukuza/ Stanger Transitional Local Council and Dolphin Coast Transitional Local Council, disestablished in terms of Provincial Notice No. 345 of 2000 in terms of section 12 of the Local Government: Municipal Structures Act, 1998: Establishment of Municipalities 9DC 29, KZ 291, KZ 292, KZ 293, KZ 294) as published on 19 September 2000, are hereby repealed.

KWADUKUZA