

TITLE WASTE WATER REUSE POLICY

TITLE	WASTE WATER REUSE POLICY		
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# **WASTE WATER REUSE POLICY**

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#### 1. PREAMBLE

**WHEREAS** the Constitution of the Republic of South Africa, 1996, empowers the Municipalities to exercise Executive Authority in terms of the Local Government matters listed in part B of Schedule 4 and part B of Schedule 5 and any other matter assigned to them by National or Provincial Legalisation;

**WHEREAS** Schedule 4part B of the Constitution lists the provision of Potable Water Services as a function falling under the Functions and Powers of Local Governments.

**WHEREAS** Municipalities are Water Services Authority in terms of section 1 of the Water Services Act, 1977 (Act No. 108 of 1977);

**WHEREAS** Municipalities may become Water Services Providers in terms (of) section 19 of the Water Services Act:

**WHEREAS** section 11(1) of the Water Services Act imposes a duty on Water Services Authorities to make sure that all consumers or potential consumers in their area of jurisdiction have progressive, efficient, affordable, economical and sustainable access to water services.

**WHEREAS** section 11(3)(a) of the Water Services Act authorises Water Services Authorities, in ensuring access to water services, to consider alternative ways of providing access to water services.

**WHEREAS** section 1 of Local Government: Municipal Systems Act, 2000 (Act No. 23 of 2000) (Systems Act) defines:

- (a) "Local Community or Community", in relation to a Municipality, as a body of person compromising (comprising) the residence (residents) of the Community and/or the Rate Payers of the Municipality; and
- (b) "Municipal Service" as a service that a Municipality, in terms of its powers and functions, provides or may provide for the benefits of the local community;

**WHEREAS** section 5(1)(g) of the Systems Act gives rights to members of local community to have access to Municipal Services provided by a Municipality, and section 5(2)(b) of the Systems Act imposes a duty on members of a local community to pay promptly service fees, surcharges on the fees, rates on property and other taxes, levies and duties imposed by a Municipality.

**WHEREAS** section 11(3)(a) of the Systems Act empowers Municipalities to exercise their Legislative or Executive Authority by developing and adopting policies, plans, strategies and programmes including setting targets for delivery.

**WHEREAS** section 11(3)(f) of the Systems Act empowers Municipalities to exercises their Legislative or Executive Authority by providing Municipal Services to their local community, or appointing appropriate Service Providers to do so in accordance with the criteria and processes as set out in section 78 of the Systems Act.

**WHEREAS** section 73(1) of the Systems Act imposes a duty on the Municipalities to give effect to the provisions of the Constitution, including; (a) giving priority to the basic needs of the local community, (b) promoting development of the local community, and (c) ensuring that all members of the local community have access to at least the minimum level of basic Municipal Services.

**WHEREAS** section 74(1) of the Systems Act empowers, and imposes a duty on, a Municipal Council to adopt and implement a tariff policy on the levying of fees for Municipal Services

provided by the Municipality itself or by way of service delivery agreements, and which complies with the provisions of the Systems Act, the Municipal Finance Management Act and any other applicable (legislation).

**WHEREAS** section 76(b) of the Systems Act (<u>authorises</u>) Municipalities to provide a Municipal service through an external mechanism by entering into service delivery agreement with other organs of state or any other persons or institutions legally competent to operate a business activity.

**WHEREAS** section 120 of the MFMA authorises Municipalities to enter into Private Public Partnership Agreements: Provided that certain conditions are met.

**WHEREAS** water is a critical resource for social and economic development of any region in South Africa, and KwaZulu-Natal in particular.

**WHEREAS** water resources are getting depleted due to adverse changes in climatic conditions, scanty and erratic rainfall, increasing industrialisation, population growth, exploitation of ground water, increasing demand for domestic purposes, etc.

WHEREAS the City of Umhlatuze (the Municipality) is a key economic hub in the Province of KwaZulu-Natal, with a population of approximately four hundred thousand (400 000) people. The Municipality is the home to numerous world established large heavy industrial concerns which drive the regional economy. Furthermore, the Municipality is home to the Port of Richards Bay which is described as having a great potential to play a key role in the shaping of South Africa's future growth and prosperity and is further identified as being one of the world's leading bulk Ports.

**WHEREAS** the Municipality, as a large and growing economic centre, is dependent on an adequate supply of water to sustain both itself and its local community, an inadequate supply of water will meaningfully constrain the planned growth and development potential of the City, with obvious and serious negative social economic consequences for both the Region and the Country.

WHEREAS the Municipality has, for a period of time, recognised the importance of securing an adequate water supply in order to underpin its planned growth. This recognition is manifested by the significant preparatory work undertaking by Municipality in the form of water resource studies and master planning documents.

**WHEREAS** the Municipality is expecting growth in demand for water within its jurisdictional area to outgrow the available yield from the current water sources. Without additional source of water the expected growth will be limited by the availability of water.

**AND WHEREAS** the Municipality has sourced and obtain expert advice to the effect that the readily available industrial and household effluent can be treated through appropriate Wastewater Treatment Works (WWTW) and the use of treated effluent, mainly by Industrial sector, will result in augmenting the water sources for the Municipality. This in turn will result in reducing demand for potable water by Industrial sector - currently being supplied with potable water for their commercial and industrial requirements - and free up a good amount of potable water for domestic and commercial use.

**WHEREFOR** the Municipality has, as part of discharging and fulfilling its constitutional and statutory obligations and objectives of providing access to water and sanitation services by its inhabitants, decided to formulate and adopt this policy which specifically deals with the need for and the use of treated effluent within its jurisdictional area for purposes of making more potable water available to more domestic, commercial and other appropriate stakeholders.

#### 2. PURPOSE

Water is the most important natural resource required to sustain all forms of life on earth. Availability of water is undisputedly one of the most critical components for sustaining economic activities in any given society.

Within the Municipality's jurisdictional area, the commercial and industrial sectors account for the bulk usage of water and further growth would increase the demand for water on the Municipality. The reuse of water would be regarded as an alternative option to supplementing this need and those "free up" the demand for potable water for domestic, commercial and industrial sectors.

The Municipality has undertaken preparatory work in the form of water resource studies and master planning documents that resulted in the Municipality recognising the importance of securing an adequate water supply in order to underpin it's planned growth. The preparatory work undertaken by the Municipality identified that the water demand in 2025 is expected to increase by seventy-five percent (75%) from the current levels and that the demand is expected to exceed the current water use by the Municipality within the next few years. The Municipality therefore seeks to secure an adequate water supply to underpin its planned growth.

Given the background of very high stress on existing water resources and distribution, the Municipality is continuously looking for additional sources of water to supplement the limited water sources available within its jurisdiction. Thus it becomes imperative to explore the option of reusing treated wastewater and use it as a source of water for various purposes. Apart from the need of reducing the pollution of surface, ground and sea water, world over the wastewater is increasingly seen as a water resource for reuse of water that can ideally be utilised for non-potable purposes. The treated wastewater produced by Municipal Wastewater Treatment Works Plants can provide a reliable source of water. Hence, there is a need to adopt new perspective towards wastewater and its reuse.

The Municipality, as a Water Services Authority in terms of <u>(the)</u> Water Services Act, has a constitutional and statutory obligation to provide access to water and sanitation to its inhabitants. With only available potable water, which is limited, the Municipality finds it difficult to discharge and fulfil its constitutional and statutory obligations and objectives. Under the circumstances, the reuse of treated effluent is one of plausible options available to the Municipality to enable it to discharge its constitutional obligations.

Moreover, if untreated or partially treated effluent goes into streams, rivers, lakes, ocean, etc, it will potentially have adverse implications on environmental safety and public health.

#### 3. SCOPE

3.1. This policy is applicable to all staff members and Councillors of the municipality who in the execution of their duties:

This policy is applicable to all consumers (industrial business consumers) residing and/or doing business within the jurisdictional area of the City of uMhlathuze Municipality.

### 4. LEGAL FRAMEWORK

Legal framework established by:

- 4.1 The Republic of South Africa Constitution (**The Constitution of the Republic of South Africa**), Act 108 of 1996;
- 4.2 Water Services Act, 1997 (Act No. 108 of 1997);

- 4.3 National Water Act 1998 (Act No. 36 of 1998);
- 4.4 Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000);
- 4.5 Local Government: Municipal Finance Management Act, 2003 (Act No. 53 of 2003);
- 4.6 Local Government: Municipal Structures Act, 1998 (Act No. 117 of 1998);
- 4.7 Intergovernmental Relations Framework Act, 2005 (Act No. 13 of 2005);
- 4.8 **The Municipality's** Water Service Bylaws.

#### 5. DEFINITIONS AND ABBREVIATIONS

- 5.1 "agreement" means the written contractual relationship between the Municipality or its appointed Agent and a (and Industrial business) consumer, as provided for in the Municipality's Water Services Bylaws;
- 5.2 **"authorised official"** means employee of the Municipality responsible for carrying out any duty or function or exercising any power in terms of the Municipality's Water Services Bylaws and includes employees delegated to carry out or exercise such duties, functions or powers;
- 5.3 "appointed Agent" means a service provider appointed by the Municipality in terms of Sections 78 and 81(2) of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000), "service provider" has the corresponding meaning;
- 5.4 "consumer" means –
- (a) any person who occupies premises to whom, and in respect of which premises, the Municipality or its appointed Agent:
  - (i) has agreed to provide treated effluent supply services;
  - (ii) is providing treated effluent supply services; or
  - (iii) has entered into an agreement with the Municipality or its appointed Agent for the provision of treated effluent supply services to or on any premises.
- (b) the owner of any premises to which the Municipality or its appointed Agent is providing treated effluent supply services;
- (c) where treated effluent supply services are provided through a single connection to a number of accommodation units or consumers or occupiers, the person to whom the Municipality or its appointed Agent agreed to provide such treated effluent supply services; and
- (d) any end-user who receives treated effluent supply services from the Municipality or its appointed Agent or other water supply services institution.
- 5.5 **"industrial business consumers"** means business consumers who get the supply of Treated effluent and use it for industrial purposes;
- 5.6 **"industrial business water consumer"** means business consumers who get the supply of potable water and use it for industrial purposes;
- 5.7 "industrial purposes" in relation to the supply of treated effluent means treated effluent supplied to any premises which constitutes a factory as defined in the General Administrative Regulations, published in Government Notice R2206 of 5 October 1984 or any succeeding legislation, including the use of water and/or treated effluent for purposes of mining, manufacturing, retailing and service industries, generating electricity, land-based transport, construction or any related purpose;
- 5.8 **"industrial use"** means the use of water for mining, manufacturing, generating electricity, land based transport, construction or any related purpose;

- 5.9 **"mandatory consumers"** means Industrial Business Consumers who consume more than **(1 ml/)** day of water and who are conducting their business within Industrial zone;
- "meter" means a water meter as defined by Government Notice R 2362 dated 18 November 1977, published in terms of the Trade Metrology Act, 1973 (Act No. 70 of 1973) or any succeeding legislation or, in the case of a water meter of a size greater than 100 mm, a device which measures the quantity of water or treated effluent passing through it, including a pre-paid meter;
- 5.11 "Municipality" means the City of uMhlathuze Municipality;
- 5.12 "off-taker Industrial (<u>business</u>) consumers" means Industrial business consumers who have entered into an (<u>a written</u>) agreement with the Municipality or its appointed agent to receive Treated effluent for Industrial purposes;
- 5.13 **"Potable water"** means water that is safe to drink or to use for food preparation and commercial use;
- 5.14 **"Tariff of Charges"** means the Tariff Bylaw promulgated by the Council in terms of bylaw 75 of the Local Government: Municipal Systems Act, No. 32 of 2000, or in terms of bylaw 75A of that Act to levy and recover fees, charges or tariffs;
- 5.15 "treated effluent" means wastewater which has been treated:
- 5.16 "treated effluent installation" means the pipes and 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 treated effluent on such premises, and includes a pipe and a 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 Municipality;
- 5.17 **"treated effluent supply system"** means a structure, aqua duct, pipe, valve, pump, meter or other apparatus relating thereto which is vested in the Municipality and is used, or intended to be used, in connection with the supply of treated effluent and includes any part thereof;)
- 5.18 **"water services facility"** means any land on which there is infrastructure installed or used by the Municipality or a catchment area in connection with the supply of treated effluent:
- 5.19 "**user**" means -
- (a) any person who occupies premises to whom, and in respect of which premises, the Municipality or its appointed Agent -
  - (i) has agreed to provide treated effluent services;
  - (ii) is providing treated effluent services; or
  - (iii) has entered into an agreement with the Municipality or its appointed Agent for the provision of treated effluent services to or on any premises;
- (b) the owner of any premises to which the Municipality or its appointed Agent is providing treated effluent services;
- (c) where treated effluent services are provided through a single connection to a number of accommodation units or users or occupiers, means the person to whom the Municipality or its appointed Agent agreed to provide such treated effluent services; and
- (d) any end-user who receives treated effluent services from the Municipality or its appointed Agent or other treated effluent services institution;
- 5.20 "water services" means the supply of treated effluent services;

- 5.21 **"water supply"** means the supply of treated effluent by the Municipality or its appointed Agent;
- "water supply system" means a structure, aquaduct, pipe, valve, pump, meter or other apparatus relating thereto which is vested in the Municipality and is used, or intended to be used, in connection with the supply of water and/or treated effluent and includes any part thereof:
- 5.23 "R/KL" means Rand per Kilo Litre
- 5.24 "ML" means Mega litre
- 5.25 "DSCR" means Debt Service Coverage Ratio

#### 6. ROLES AND RESPONSIBILITIES

## 6.1 The Municipality

Apart from wastewater, water recycling and reuse will be the primary responsibility of the Municipality. Accordingly, a creation of capacity for wastewater management, planning and implementation for water recycling plant infrastructure, keeping in mind the availability of the funds, is primarily a responsibility of the Municipality.

### 6.2 Implementing agency

It is an agency appointed by Municipality who shall plan, execute, operate and maintain the Collection and Treatment of Wastewater and Reuse Project.

## 6.3 Regulatory agencies

The regulatory agencies shall assist the Municipality in finalising the legal framework and quality standards, treated wastewater norms for using the treated effluent for various purposes.

### 7. POLICY DIRECTIVES AND PROCEDURE

## 7.1 Ownership of the Treated effluent

The prime responsibility for treatment of wastewater, wastewater recycling and reuse will be with the City of uMhlathuze Municipality (Municipality). Accordingly, creation of capacity for wastewater management and, planning and implementation for wastewater reuse infrastructure will be the responsibility of the Municipality, depending on the availability of the funds. Thus, economic rights on the Treated effluent shall reside with the City of uMhlathuze Municipality (Municipality). The economic rights include any economic activity generated downstream due to supply of Treated effluent in water bodies such as streams, rivers, canals, lakes, etc.

### 7.2 Prevention of contamination of other sources of water

Treated effluent shall meet all the statutory quality standards. Stringent quality standards will be adopted such that it does not contaminate other sources of water.

## 7.3 Consider Treated effluent as an additional source of water

Treated Effluent shall be considered as an additional source of water through its reuse to suitable (<u>Industrial business</u>) consumers.

#### 7.4 Promote Treated effluent as an economic resource

Treated effluent shall be considered as an economic commodity and used to generate resources which shall be used primarily for sewage collection and treatment besides paying for fresh water resources.

### 7.5 Develop sewage treatment projects on a financially sustainable basis

The price of Treated effluent shall be based on the principle of recovery of costs incurred on treatment and distribution to have sustainable projects.

#### 7.6 Reuse of domestic wastewater of Industrial sector

Industrial establishments shall treat domestic wastewater generated from their units and reuse it for appropriate non-potable use whereas the Industrial effluent shall be supplied to the Municipality or its appointed agent for purposes of treatment by the industrial establishments for purposes of treatment.

#### 7.7 Mandate of use of treated effluent

Treated Effluent shall be used on the principle of substitution of potable water with it. While making such a substitution, suitability of Treated effluent to use shall be considered. While making use of Treated effluent, necessary care will be taken to the effect that treated wastewater is not mixed with or used with potable water.

Treated effluent shall initially be mandated for the use by off-taker Industrial business consumers. The mandate may be extended to different class of users depending on the availability of Treated effluent. The City of uMhlathuze Municipality (Municipality) shall endeavour to use the available Treated effluent to the maximum. As and when the more Treated effluent becomes available the same shall be put to use by more consumers.

### 7.7.1 Non-potable use:

## 7.7.1.1 Mandatory use

It shall be mandatory, for all industrial business consumers within the jurisdiction of the Municipality, consuming more than ONE 1 ML/day (1 ml/day) of potable water for industrial purposes, to use Treated effluent. However, it shall not be mandatory to use Treated effluent as potable water for human consumption.

#### 7.7.1.2 Mandatory on fulfilling certain conditions

#### 7.7.1.2.1 Construction activities:

The City of uMhlathuze Municipality (Municipality) or its appointed agent shall:

- (i) provide facility for filling tanker with Treated effluent to construction sites on payment based on a prescribed Tariff. Such a filing points may be provided at more than one place depending on demand assessment at that level;
- (ii) lay special supply lines for Treated effluent in developing areas, if found feasible; and
- (iii) stop supplying municipal potable water once the above-mentioned facility has been put in place.

### 7.7.1.2.2 <u>Large commercial or Institutional consumers</u>

The City of uMhlathuze Municipality (Municipality) or its appointed agent shall make endeavours to lay down Treated effluent pipe lines to institutional areas, business districts (where Industrial business consumers run their businesses) or areas having large number of such users to cater for their needs. In such a situation, it shall be mandatory for such users to use Treated effluent for (their Industrial) purposes of flushing toilets, watering green areas, water for fire hydrants, etc.

### 7.7.1.2.3 Municipal uses

Treated effluent shall be used for the following Municipal purposes mandatorily after installing such infrastructures as may be necessary:-

- (i) Maintenance of parks and gardens and developing urban landscaping;
- (ii) Rejuvenation of ponds, lakes and rivers; and
- (iii) Supply water for emergency purposes like fire brigade, etc.

### 7.7.1.2.4 Other non-potable uses

The City of uMhlathuze Municipality (Municipality) may also find other users for non-potable use unique to their context, etc, and may make it mandatory for them to use Treated effluent and restrict use of potable water.

### 7.7.1.3 Agriculture / Irrigation

Treated effluent may also be used for agriculture / irrigation purposes.

### 7.7.2 Potable use

Considering social sensitivities and the public perception towards Treated effluent, presently it shall not be used for potable purposes and uses which involve direct human contact. However, in the future with the increase in water demand, advancement in treatment technology, competitive rates and change in public perception, treated effluent may be used for potable purposes.

#### 7.8 SUPPLY OF TREATED EFFLUENT

### 7.8.1 Availability of Treated effluent

The City of uMhlathuze Municipality shall declare availability of Treated effluent via written notice on or before the 1<sup>st</sup> of July of every year. The coming into effect of this policy shall contain details on both quantity and quality of water (<u>Treated effluent</u>) besides the location of wastewater treatment works plants where the Treated effluent is available.

## 7.8.2 Unauthorised use of Treated effluent

The Treated effluent may only be used by persons (Industrial business consumers):

- 7.8.2.1 who have entered into a written agreement with the City of uMhlathuze Municipality or its appointed agent;
- 7.8.2.2 whose potable water supply system has a suitable backflow preventer installed to the satisfaction of the authorised official;
- 7.8.2.3 who receives treated effluent, through a metered and backflow prevented treated effluent supply point specifically installed by the Municipality or its appointed agent for the supply of treated effluent;

### 7.8.3 Application for supply of Treated Effluent

- 7.8.3.1 All (Industrial business) water consumers who are consuming more than one (1) ML (1M/day), including industrial sector, shall apply for allocation of treated effluent in terms of the City of uMhlathuze Municipality's water services bylaws.
- 7.8.3.2 Treated effluent from the water supply system of the City of uMhlathuze Municipality will not be supplied to premises of the <u>(Industrial business)</u> consumer unless the <u>(Industrial business)</u> consumer has applied to the Municipality or its appointed agent for a supply and

- such application has been agreed to, subject to such conditions as may be imposed by the Municipality or its appointed agent.
- 7.8.3.3 The City of uMhlathuze Municipality or its appointed agent may take into account the volume of a daily water consumption by an applicant when considering the Applications.
- 7.8.3.4 The City of uMhlathuze Municipality or its appointed agent may, on written notice, move any (Industrial business water) consumer, who consumes more than 1ML (1 ml/day) of water per day, to Treated Effluent supply services without the (Industrial business) consumer making the application: Provided that the (Industrial business) consumer enters into a (written) agreement with the Municipality or its appointed agent in terms of Municipality's Water Services Bylaws.
- 7.8.3.5 The (Industrial business) consumer who has applied for, and is being supplied with, treated effluent will be liable for all the fees in respect of such supply, until the supply has been interrupted at the request of the (Industrial business) consumer or the agreement has been terminated in accordance with Municipality's Water Services Bylaws. The fees shall be determined in terms of the Municipality's Water Services Bylaws.
- 7.8.3.6 The application for the supply of treated effluent must contain at least the following information:
- 7.8.3.6.1 a declaration that the applicant is aware of and understands the contents of the agreement;
- 7.8.3.6.2 acceptance of liability in terms of the Municipality's Water Services Bylaws for the cost of the supply of treated effluent until the agreement is terminated;
- 7.8.3.6.3 the name of the applicant and his or her identity number (<u>its registration details including registration number)</u>;
- 7.8.3.6.4 the address or erf number of the premises to or on which treated effluent is to be supplied;
- 7.8.3.6.5 the address where accounts must be sent;
- 7.8.3.6.6 the purpose for which the treated effluent is to be used;
- 7.8.3.6.7 the agreed date on which the supply of treated effluent will commence;
- 7.8.3.6.8 the plumbing layout; and
- 7.8.3.6.9 an undertaking by the applicant to inform the Municipality or its appointed agent of any change in regard to clauses 7.8.3.6.1 to 7.8.3.6.8
- 7.8.3.7 In the event of the purpose for or extent to which the treated effluent was applied for changes, the (Industrial business) consumer is required to promptly, in addition to advising the Municipality or its appointed (agent) of the change, enter into a new agreement with the Municipality or its appointed agent.
- 7.8.3.8 Treated effluent may only be supplied where reticulation exists.
- 7.8.3.9 Reticulation may be expanded if the demand increases.

### 7.8.4 Agreements

- 7.8.4.1 All (Industrial business) consumers of treated effluent are required to enter into an (written) agreement with the Municipality or its appointed agent subject to the provisions of the Municipality's Water Services Bylaws.
- 7.8.4.2 The agreement contemplated in clause 7.8.4.1 must include all the information referred to in clause 7.8.3.6.

## 7.8.5 <u>Termination of Agreements</u>

- 7.8.5.1 An (Industrial business) consumer may terminate an agreement for the provision of treated effluent by giving the Municipality or its appointed agent a notice in terms of the Municipality's Water Services Bylaws.
- 7.8.5.2 If a (an Industrial business) consumer terminate its/his/her agreement with the Municipality or its appointed agent the Municipality or its appointed agent may charge a (an Industrial business) consumer for early termination of the agreement in circumstances where such termination is prejudicial to the Municipality or its appointed agent.
- 7.8.5.3 The authorised official may, by written notice of not less than 30 days provided for in the Municipality's Water Services Bylaws, advise a **(an Industrial business)** consumer of the termination of his/her/its agreement for the supply of treated effluent, if any or all of the following occurs:
- 7.8.5.3.1 the agreement of a **(an Industrial business)** consumer has expired, that and a consumer has not made arrangements to the satisfaction of the authorised official for the continuation of the agreement; and/or
- 7.8.5.3.2 a (an Industrial business) consumer has failed to comply with the provisions of Municipality's Water Services Bylaws or has failed to rectify such failure following the issue of a compliance notice issued in terms of Municipality's Water Services Bylaws; and/or
- 7.8.5.3.3 a **(an Industrial business)** consumer has failed to pay any fees due and payable in terms of the Municipality's Water Services Bylaws.
- 7.8.5.4 The Municipality or its appointed agent may terminate an agreement for the supply of treated effluent if the premises to which such agreement relates have been vacated.

## 7.8.6 Quantity of Treated effluent supplied

A meter system shall be used to quantify the amount of treated effluent supplied to (Industrial business) consumers. For the purpose of assessing the quantity of treated effluent supplied through a meter over a specific period, it shall be deemed, unless the contrary can be proved, that—

- 7.8.6.1 the quantity is represented by the difference between readings of the meter taken at the beginning and end of such period;
- 7.8.6.2 the meter was registering correctly during such period; and
- 7.8.6.3 the entries in the records of the Municipality or its appointed agent were correctly made;
- 7.8.6.4 provided that if treated effluent is supplied or taken without its passing through a meter where tampering has occurred, the estimate by the authorised official of the quantity of such treated effluent shall be deemed to be correct.

#### 7.8.7 Resale of Treated effluent

- 7.8.7.1 No person (Industrial business consumer) who is supplied with treated effluent in terms of (the Municipality Water Services) Bylaws may sell such treated effluent unless—
- 7.8.7.1.1 a provision has been made thereof in an agreement referred to in this policy and in terms of the Municipality's Water Services Bylaws; or
- 7.8.7.1.2 the (Industrial business) consumer has obtained the prior written permission of the authorised official.
- 7.8.7.2 If the authorised official grants the permission referred to in clause 8.8.7.1.2, he or she may stipulate the maximum price, determined by Council, at which the treated effluent may be sold and impose such other conditions as he or she may deem fit.

7.8.7.3 Permission referred to in clause 8.8.7.1.2 may, due to failure to comply with the conditions imposed by the authorised official, be withdrawn at any time.

## 7.8.8 Availability and assurance of supply of Treated effluent

- 7.8.8.1 The Municipality or its appointed agent shall endeavour, within its available resources, to ensure the supply of treated effluent, but this must (not) be construed as constituting an absolute undertaking to maintain, at any time or at any point in its water (treated effluent) supply system,
- 7.8.8.1.1 an uninterrupted supply;
- 7.8.8.1.2 a specific pressure or rate of flow in such supply;
- 7.8.8.2 The Municipality or its appointed agent may, with prior written notice, interrupt the supply of treated effluent.

## 7.8.9 Existing potable water supply

The existing potable water supply to those intending to use treated effluent shall be reduced in proportion to the amount of treated effluent they are consuming. The supply shall continue to those not using the treated effluent.

#### 7.8.10 Enforcement of use

Enforcement of use shall be undertaken by the City of uMhlathuze Municipality.

#### 7.9 ENVIRONMENTAL ASPECTS

The development of the Collection and Treatment of Wastewater and Reuse Project will take into account all environmental aspects, while choosing method of treatment, storage of wastewater and management thereof. Effective procedures will be put in place to adequately factor in environmental and social opportunities and concerns during all stages of use of Treated effluent. Effective strategy shall be evolved to keeping vigilance and evaluate quality of Treated effluent.

## 7.9.1 Quality standards and treatment norms

- 7.9.1.1 The treatment of wastewater shall be done according to effluent discharge norms made by the National government from time to time. It is the prerogative of the National government to set up better standards of treatment, if it chooses to do so. The municipality shall be obliged to comply with new standards.
- 7.9.1.2 If a (an Industrial business) consumer requires a treated effluent of better quality and the Municipality or its appointed agent is not in a position to better the quality, the same shall be done by a (an Industrial business) consumer concerned at his/her/its cost. The Municipality has a discretion to make a decision regarding the higher level treatment of wastewater on substantial demand from (Industrial business) consumers. In case such a decision is made, charges for capital and operation and maintenance of higher level of treatment will be recovered from the (Industrial business) consumers.

## 7.9.2 <u>Technology options</u>

A key component in any strategy aimed at increasing the coverage of wastewater treatment will be application of appropriate wastewater treatment technologies that are effective, simple to operate and low costs, both in capital and in operation and maintenance.

Technology options for wastewater recycling plants can be categorized based on treatment standard, quantum of sewage inflow, location of plants or utilization of recycled wastewater, etc. Appropriate technology shall be adopted so as to meet the quality standards of treated effluent under the policy. However, it shall be ensured that new Waste Water Treatment

Works Plants conform to such standards so as to enable utilization of treated effluent directly by the (Industrial business) consumers enumerated in the policy as far as possible.

#### 7.10 PRICING PRINCIPLES

The Treated effluent shall be considered as an economic commodity when determining the price thereof. The price of the treated effluent shall be determined based on investment made, quality of water supplied, requirement of distribution infrastructure and other social, cultural and business factors.

#### 7.10.1 Factors to be considered

When deciding the price of treated effluent, the Municipality shall consider the following factors:-

- 7.10.1.1 Affordability charge: (Capex Costs, excluding distribution Infrastructure, life cycle and financing costs, and Target Equity Return and DSCR)
- 7.10.1.2 Volumetric charge: (Operational costs on a R/KI basis, which raises by inflation annually, in line with the operational costs increases).
- 7.10.1.3 Distribution charge: (Capital costs of distribution infrastructure allocate to each off taker, based on utilization of each specific pipeline on a volume basis, Distribution charge (R/KL) calculated for each of taker, Distribution charge is fixed for operations period.

## 7.10.2 <u>Variation and Escalation</u>

The price shall be subject to price escalation and a clause shall be included in the agreement entered into between the Municipality or its appointed agent and <u>(Industrial business)</u> consumers. The price of treated effluent can be reviewed by the Municipality annually.

## 7.10.3 Recovery and billing

The Municipality or it appointed Agent shall have an automated systems of measurements, billing and recovery of water charges.

### 7.11 Private/external sector participation

The use of the treated effluent is of high order of priority. All efforts shall be made to expedite to plan, prepare and implement such project.

### 7.11.1 Possibilities of funding

The possibility of funding by external funding agencies shall be explored by the Municipality.

### 7.11.2 Options of Private Public Partnership (PPP)

Being empowered and authorised by section 120 of MFMA, the Municipal PPP Regulations and Municipal PPP Guidelines, the Municipality has taken a decision to implement the Collection and Treatment of Wastewater and Reuse Project through a Private and Public capital by using a procurement model based on Public Private Partnership (PPP). The PPP model has been decided upon by the Municipality, in consultation with National and Provincial Treasuries, after an adequate due diligence and detailed assessments have been done.

### 8. MONITORING AND REVIEW

The User Department shall review the POLICY: Water Services on a regular basis and shall adapt it appropriately to ensure that it meets the business and service delivery requirements of the uMhlathuze Municipality.