

# Development of regulations for water care works and process personnel

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## Abstract

It is well known that South Africa is a water scarce country and that return of high quality effluents to the water resources is essential. In terms of the National Water Act, 1998 (Act 36 of 1998) the National Government has public trusteeship of the nation's water resources and therefore, acting through the Minister, must ensure that water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner, for the benefit of all persons and in accordance with its constitutional mandate. For this reason and the sensitive nature of South Africa's water resources, it is necessary that water care works for both potable and wastewater treatment be managed to ensure that stipulated water quality standards are adhered to.

Regulation No. 2834, in terms of the Water Act, 1956 (Act 54 of 1956) for the erection, enlargement, operation and registration of water care works, was promulgated in an attempt to ensure that operators with relevant qualifications were running the different classes of water care works. This regulation had its shortcomings however, in the fact that it focussed more on qualifications and not competence and skill of process personnel. With the promulgation of the National Water Act of 1998 (Act 36 of 1998) it was felt that changes to the regulation were necessary.

In terms of the South African Qualifications Authority Act of 1995 (SAQA) and the Skills Development Act of 1998 (SDA) persons must be trained and assessed using unit standards generated for each particular sector. In light of this unit standards have been developed to take into account recognition of prior learning as well as qualifications and competencies. This means that when a person achieves a unit standard the persons' ability to do a certain task is tested together with the persons understanding of the theory that underpins the task being done. The paper to follow sets out a draft regulation for both the classification of the Water Care Works as well as their process personnel.

## Introduction

It is well known that South Africa is a water scarce country and that return of high quality effluents to a resource is therefore essential. In terms of the National Water Act, 1998 (Act 36 of 1998) the National Government has public trusteeship of the nation's water resources and therefore, acting through the Minister, must ensure that water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner, for the benefit of all persons and in accordance with its constitutional mandate. For this reason and the sensitive nature of South Africa's water resources, it is necessary that water care works for both potable and waste water treatment be managed to ensure that stipulated water quality standards are adhered to.

## Background

Rapid urbanisation and development in SA has meant that water care works have to produce larger quantities of potable water for distribution and also treat larger volumes of wastewater for discharge back to water resources. The water qualities both for drinking water purposes as well as the returned effluents must, however, not deteriorate.

Poor planning coupled with the need for development has often meant that, in particular sewage works and pump stations are not upgraded when necessary. Budget cuts within the Local Authorities have also meant that cuts to the operation and maintenance

budgets as well as the employment of skilled personnel of sewage works are common, giving rise to major pollution incidents.

Experience has indicated that a large proportion of the operating staff at water care works are not competent to perform the tasks expected of them to ensure that plant effluents comply with water quality standards. In December 1985 regulation No. 2834, in terms of the Water Act, 1956 (Act 54 of 1956) for the erection, enlargement, operation and registration of water care works, was promulgated in an attempt to alleviate this problem. This regulation had its shortcomings however, in the fact that it focussed more on qualifications and not competence and skill of process personnel. A process of updating Regulation No. R2834 (Regulation in terms of Section 26 read in conjunction with section 12A of the Water Act, 1956 (Act 54 of 1956), for the erection, enlargement, operation and registration of Water Care Works to fit in with the National Water Act, 1998 (Act 36 of 1998), was started in 1999. At the initial meeting with the industry concerned it was ascertained whether such regulations were still necessary, before proceeding. After further consultation draft regulations were drawn up for comment but due to various hitches, never gazetted.

## The South African Qualifications Authority Act, 1995

Towards the end of 2000 it became apparent that a regulation of this nature would be severely affected by the South African Qualifications Authority (SAQA) Act, 1995 which provides for the implementation of a National Qualifications Framework (NQF). The main objective of the NQF being to create a flexible and integrated education and training system, which promotes a process of life-long learning through planned career paths. The NQF creates a unified hierarchical framework that is organised over three bands,

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