



TANZANIA STANDARD

Guidelines for treated wastewater use for irrigation projects - Part 3- Components of a reuse project for irrigation

FOR STAKEHOLDERS' COMMENTS

TANZANIA BUREAU OF STANDARDS

This Tanzania Standard was published under the authority of Board of Directors of Tanzania Bureau of Standards.

Tanzania Bureau of Standards (TBS) is the statutory national standards body for Tanzania established under Standards Act No.3 of 1975 and replaced by the Standard Act No. 2 of 2009.

The Environmental Management Divisional Standards Committee, under whose supervision this Tanzania Standard was prepared, consists of representatives from the following organizations;

The Vice President's Office – Directorate of Environment (VPO)
Sokoine University of Agriculture (SUA)
Ministry of Industry and Trade (MIT)
*National Environment Management Council (NEMC)
Muhimbili University of Health and Allied Sciences (MUHAS)
*Ardhi University (ARU)
Tanzania Pesticide Research Institute (TPRI)
Tanzania Portland Cement Public Limited (TPCPL)
Clear Production Center – Tanzania (CPC)
AGENDA for Environment and Responsible Development (AERD)
Government Chemist Laboratory Authority (GCLA)

The organizations marked with an asterisk (*) in the above list together with the following were directly represented on the Technical Committee entrusted with the preparation of this Tanzania Standard.

University of Dar es Salaam (UDSM)
Water Institute (WI)
BORDA Africa
Occupational, Safety and Health Association (OSHA)
Dar es Salaam Water Supply and Sanitation Authority (DAWASA)
Energy and Water Utilities Regulatory Authority (EWURA)
Ministry of Water (MW)

0. National foreword

The Tanzania Bureau of standards is the statutory national standards body for Tanzania, established under the act.No.3 of 1975, amended by act.No.2 of 2009

This Tanzania standard is being prepared by the Wastewater Technical Committee, under the supervision of the Environmental Management Divisional Standards Committee (EMDC)

This Tanzania Standard is identical to ISO 16075-3 Guidelines for treated wastewater use for irrigation projects - Part 3- Components of a reuse project for irrigation published by the International Organization for Standardization (ISO).

Terminology and conventions

The text of the International Standard is hereby being recommended for without deviation for publication as Tanzania standard.

Some terminology and certain conventions are not identical with those used as Tanzania standards; attention is drawn to the following:

The comma has been used as a decimal marker for metric dimensions. In Tanzania, it is current practice to use a full point on the baseline as the decimal marker.

Wherever the words "International Standard" appear, referring to this standard, they should read as "Tanzania Standard".

SCOPE

This document covers the system's components needed for the use of treated wastewater (TWW) for irrigation. Emphasis is placed on irrigation methods; mainly drip irrigation, as this method represents an efficient method of irrigation and water saving, while reducing the pollution of the crops. Despite the fact that water quality and filtration of treated wastewater (herein TWW) using drip irrigation are critical, open irrigation systems are more popular and are frequently used for irrigation with TWW and therefore are covered in this document.

This document covers issues related to the main components of a TWW irrigation project, including the following:

- i. Pumping stations;
- ii. Storage reservoirs;
- iii. Treatment facilities (for irrigation purposes);
- iv. Filtration and disinfection;
- v. Distribution pipeline networks;
- vi. Water application devices: irrigation system components and treatment

This document is not intended to be used for certification purposes.

