



TANZANIA STANDARD

Guidelines for treated wastewater use for irrigation projects- Part 5 – Treated wastewater disinfection and equivalent treatments

TANZANIA BUREAU OF STANDARDS

EMDC 1(903) DTZS /ISO 16075-5

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 16075-5 Guidelines for treated wastewater use for irrigation projects- Part 5 – Treated wastewater disinfection and equivalent treatments 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 provides a guideline for the application of various available methods of treated wastewater (TWW) disinfection for an effective inactivation or removal of pathogens from TWW, which is intended for irrigation purposes.

This document deals with:

- Chemical and physical technologies, principles of operation, and establishment of effective doses to be applied, possible interferences, and technical guidance for design and monitoring;
- Comparison of the advantages and disadvantages of various disinfection methods suitable for TWW;
- Potential environmental effects of the disinfection methodologies and ways to minimize those impacts;
- Disinfection at different locations in the TWW use system, including in the wastewater treatment plant, within the distribution system and at the point of use.

