

NAMS 0001:2016

First Edition

NAMIBIAN STANDARD

NAMS 0001:2016 – Requirements for Dry Sanitation Technologies in Namibia

This Namibian standard has been developed within Namibian Standards Institution (NSI)

Published by the Namibian Standards Institution (NSI)
Established by section 2 of the Standards Act, 2005 (Act No 18 of 2005)
Channel Life Tower, M1 Floor, Post Street Mall
P.O. Box 26364 Windhoek, Namibia
Tel +264-61-386400, Fax +264-61-386454, Website: www.nsi.com.na
© NSI



NAMS 0001: 2016

First Edition

Key words

Sanitation, Dry Sanitation, Improved Sanitation, Latrine

Foreword

This NAMS 0001:2016 – Requirements for Dry Sanitation Technologies in Namibia is a new Namibian developed Standard. The Namibian Standards Institution Technical Committee 10 was responsible for development of the Standard on Requirements for Dry Sanitation Technologies in Namibia

The Namibian Standards Institution (NSI) is Namibia's National Standards Body (NSB) responsible for coordinating all standardization and quality assurance activities in the country and represents Namibia at regional and international standardization bodies. The work of developing; adopting and amendment of National Standards is normally carried out through NSI technical committees. Each organization or individual interested in a subject for which a technical committee has been established has the right to be represented on that committee, being governmental and non-governmental organizations

Namibian Standards are drafted based on NSI Standards development procedures in accordance with the rules given in the International Organization for Standardisation/International Electrotechnical Commission (ISO/IEC) Directives 1, ISO/IEC Guide 21-1 and World Trade Organisation/Technical Barriers to Trade (WTO/TBT) Code of Good Practice. The main task of technical committees is to develop; adopt and amend international or regional standards. Draft Namibian standards developed by the technical committees are circulated to the relevant stakeholders for voting. Publication as a Namibian Standard requires approval by at least 50% of the committee members casting a vote. Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. NSI shall not be held responsible for identifying any or all such patent rights.

Technical Committee Representation

The following organisations were represented on the Technical Committee:

- City of Windhoek
- Ministry of Agriculture, Water and Forestry- Directorate Water Supply and Sanitation Coordination and Directorate Water Resources Management
- Ministry of Health and Social Services
- Ministry of Urban and Rural Development
- Namibia Water Corporation Limited
- Namibia University of Science and Technology
- Namibia Red Cross Society
- UNICEF Namibia

Contents	Page
Foreword	i
Introduction.....	1
Purpose of the Dry Sanitation Technology Standard.....	2
1 Scope of the Standard.....	3
2 Application.....	3
3 Use of the Standards.....	3
4 Terms and Definitions.....	4
5 Requirements for Dry Sanitation Systems.....	7
5.1 General Requirements.....	7
5.2 Site Assessment, Design and Construction.....	8
5.3 Operation and Maintenance.....	15
5.4 Service Provision.....	16
5.5 Design Check-List.....	18
References	20

Introduction

The National Sanitation Strategy (NSS) of Namibia recommends a combination of wet and dry sanitation technologies and systems to be adopted as a staged approach to a planned development with different service standards offered. “*Conventional*” sanitation options may be suited to certain situations, but in other circumstances particularly where water supplies are scarce or where basic services need to be provided quickly and economically the use of dry sanitation technologies is the preferred option.

Dry sanitation systems if properly designed, constructed and maintained function just as well as wet sanitation systems. Many community sanitation schemes have been successfully implemented utilising dry sanitation latrines in some parts of Namibia. However, other applications have been problematic. This is often due to poor design and construction practices, lack of maintenance, selection of inappropriate technology, social factors such as no community buy-in, or a combination of these reasons.

Faeces are a primary source of disease affecting humans, particularly for diarrheal diseases and worm infections. Dry sanitation facilities that are non-compliant with appropriate technical design standards are susceptible to rapid failure and extreme maintenance difficulties. This may be compounded in some cases by confusion over differing technical options for urban, peri-urban and rural areas as well as a consistent lack of communication about why and how to use sanitation facilities, resulting in constant maintenance problems. The lack of access to improved sanitation facilities has in some circumstances been caused by inadequate health and hygiene education.

The lack of operation and maintenance of dry sanitation infrastructure installed by various stakeholders lack clarity of how to empty and regularly clean dry sanitation systems and this has caused people not to use the dry sanitation technology in some situations in Namibia.

Dry sanitation technologies have evolved significantly over the past 20 years with a range of technology options being offered in the market place. One of the reasons why dry sanitation technologies are not more in demand in Namibia is due to a lack of clarity about standards and appropriate technical options.

This standard aims to provide clarification about dry sanitation provision requirements. It should also lead to improvements in the regulation of dry sanitation service providers and individuals to ensure technical and environmental standards are met and services are provided efficiently and effectively.

This standard aims to put forward a set of acceptable minimum standards for the design and construction of dry sanitation facilities in Namibia. The standard ensures the chosen technologies are healthful, safe, technically adequate, environmentally sound and sustainable.

Purpose of the Dry Sanitation Technology Standard

The Government of Republic of Namibia (GRN) has a constitutional responsibility to ensure people have the right to fair and reasonable access to public services (including water supplies and sanitation). Access to improved sanitation is a human right recognised in various international and regional instruments to which Namibia is a party. The publication of this standard is an important step in the process of meeting this responsibility and in addressing the problems of inadequate sanitation. The purpose of this standard is to:

- To define the required level of performance for dry sanitation systems to achieve societal goals;
- To strengthen codes of practice;
- To have a unified approach towards the implementation of dry sanitation technologies in Namibia as well as leading to an improvement in stakeholder coordination