SOUTH AFRICAN NATIONAL STANDARD

Above-ground storage tanks for petroleum products
Abstract

Covers the above-ground storage and handling of petroleum products at consumer installations with a total storage capacity not exceeding 200 m³. Specifies the design, manufacture and construction of above-ground storage tanks not exceeding a capacity of 85 m³.

Keywords

breather pipes, bulk to agriculture tank (BTA tank), bulk to farmer tank (BTF tank), bund walls, bunding, installation, liquid fuels, petroleum products, pipework systems, skid tank, tanks (containers), vent pipes.

Foreword

This South African standard was approved by National Committee StanSA TC 5120.18, Petroleum equipment and systems, in accordance with procedures of Standards South Africa, in compliance with annex 3 of the WTO/TBT agreement.


Annex A forms an integral part of this standard. Annexes B and C are for information only.

Introduction

In terms of section 21 of the Environment Conservation Act, 1989 (Act No. 73 of 1989), as published by Government Notice No. R. 1182 of 5 September 1997, no construction or installation of underground storage vessels for dangerous goods may be done before an Environment Impact Assessment (EIA) has been done and a report issued.

Should this report indicate special consideration for underground constructions, the recommendations given in the report should be adhered to.

Before the installation of above-ground storage tanks, and after the approval of the EIA, written permission to proceed with the installation will be obtained from the appropriate environmental control authority.
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1 Scope

1.1 This standard contains recommendations for the above-ground storage and handling of petroleum products at consumer installations with a total storage capacity not exceeding 200 m³.

1.2 This standard also covers the design, manufacture and construction of above-ground storage tanks not exceeding a capacity of 85 m³.

NOTE The design, manufacture and construction of tanks not exceeding a capacity of 85 m³ are given in annex A.

1.3 This standard does not cover the storage of liquefied petroleum gas (LPG) and petroleum products at pressures exceeding 17.2 kPa.

1.4 This standard does not cover service stations.

NOTE 1 Liquefied petroleum gas (LPG) products are covered in SANS 10087-3.

NOTE 2 Above-ground storage of petroleum products in bulk is covered in SANS 10089-1.

NOTE 3 Service stations are covered in SANS 10089-3.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. All standards are subject to revision and, since any reference to a standard is deemed to be a reference to the latest edition of that standard, parties to agreements based on this standard are encouraged to take steps to ensure the use of the most recent editions of the standards indicated below. Information on currently valid national and international standards can be obtained from Standards South Africa.

API 5L, *Recommended practice for railroad transportation of line pipe.*

API 650, *Welded steel tanks for oil storage.*

API 653, *Tank inspection, repair, alteration, and reconstruction.*

