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**SANS 10089-3:2010**

Edition 4

# **SOUTH AFRICAN NATIONAL STANDARD**

**The petroleum industry**

**Part 3: The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations**

**SANS 10089-3:2010**  
Edition 4

**Table of changes**

Change No.	Date	Scope

**Acknowledgement**

The SABS Standards Division wishes to acknowledge the valuable assistance derived from publications of the following organizations:

American Petroleum Institute

Deutsches Institut für Normung

**Foreword**

This South African standard was approved by National Committee SABS TC 28, *The Petroleum industry – Equipment and systems*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This document was published in November 2010.

This document supersedes SABS 089-3:1999 (third edition).

Reference is made in 3.3(a), 4.2.2.1, 4.4.3, 9.1 and 13.1 to "safety legislation". In South Africa this means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) (as amended from time to time).

Reference is made in 3.3(b) to "relevant legislation". In South Africa this means the Mine Health and Safety Act, 1996 (Act No. 29 of 1996).

Reference is made in 3.3(c) and 9.2 to "relevant legislation". In South Africa this means the Trade Metrology Act, 1973 (Act No. 77 of 1973).

Reference is made in 3.3(d) to "relevant legislation". In South Africa this means the National Environmental Management Act, 1998 (Act No. 107 of 1998).

Reference is made in 3.3(e) and annex A to "relevant legislation". In South Africa this means the Petroleum Products Act, 1977 (Act No. 120 of 1977).

Reference is made in 3.9 to "relevant legislation". In South Africa this means the Engineering Profession Act, 2000 (Act No. 46 of 2000).

Reference is made in clause 10 and annex A to "legislation". In South Africa this means the National Water Act, 1998 (Act No. 36 of 1998).

SANS 10089 consists of the following parts under the general title *The petroleum industry*:

*Part 1: Storage and distribution of petroleum products in above-ground bulk installations.*

*Part 2: Electrical and other installations in the distribution and marketing sector.*

*Part 3: The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations.*

Annexes A and B form an integral part of the document. Annex C is for information only.

## **Introduction**

In terms of the regulations promulgated under chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (Government Notice 385 of 21 April 2006), the construction of service stations may not commence without environmental authorization from the provincial authority responsible for environmental management. The environmental authorization requires that an environmental impact assessment be undertaken which identifies all the potential environmental implications of constructing and operating a service station.

The environmental authorization may contain certain specific conditions for the construction of the facility. These conditions may take precedence over the requirements of this document.

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## **The petroleum industry**

### **Part 3:**

The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations

## **1 Scope**

**1.1** This part of SANS 10089 covers provisions for the installation of underground storage tanks of individual capacity not exceeding 85 000 m<sup>3</sup>, pumps/dispensers and pipework at service stations and consumer installations.

**1.2** This part of SANS 10089 does not cover the installation of pressurized underground storage tanks such as liquefied petroleum gas (LPG) and compressed natural gas (CNG) storage vessels.

## **2 Normative references**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. Information on currently valid national and international standards can be obtained from the SABS Standards Division.

APEA/IP, *Design, construction, modification, maintenance and decommissioning of filling stations ("Blue Book")*.

API RP 1604, *Closure of underground petroleum storage tanks*.

EN 12954, *Cathodic protection of buried or immersed metallic structures – General principles and application for pipelines*.

EN 13617-3, *Petrol filling stations – Part 3: Safety requirements for construction and performance of shear valves*.

EN 14125, *Thermoplastic and flexible metal pipework for underground installation at petrol filling stations*.

IP method 34, *Determination of flash point – Pensky-Martens closed cup method*.

IP 1, *Institute of Petroleum performance specification for underground pipework systems at petrol filling stations, November 1995*.